



MACRO Voices
with hedge fund manager Erik Townsend

Rory Johnston: Crude Oil Outlook & SPR Discourse

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Erik: Joining me now is Rory Johnston, founder of commoditycontexts.com. Rory has been an oil analyst in Canada for many years. Rory, it's great to have you on [MacroVoices](https://macrovoices.com) as a first time guest. Thanks for joining us.

Rory: Thanks for having me, Erik.

Erik: I want to start by asking you to critique my thesis or my bold call, if you will, which our regular listeners are already familiar with. Which is I contend that the world is unable to return to pre-pandemic normal in terms of the overall global economy, for the simple reason that we don't have enough energy supply. And my argument is, it was proven actually in 2021 before there was any Russian invasion. If you look at the explosion of time spreads, that happened in 2021, we had an incredibly, incredibly tight physical market. And that was before any discussion of China coming back online. My contention is that once China does come back online, we're going to have more demand than we can ramp supply up to meet, and it's going to create a global energy crisis. Please tell me why I've got that wrong, because you know the physical market very, very well. And I'm dying to have somebody sent me straight if I've got this wrong.

Rory: I will say, I don't think you have the kind of broad contours wrong. I think that I share the view that over the next at least half decade, the supply demand balance looks tremendously bullish for all the reasons that you mentioned. We're still decently below pre-pandemic production levels, and demand is there as well. And as you mentioned, with China one day, eventually coming back to full production, you know, we're still down somewhere in the ballpark of 2 million barrels a day under where peak Chinese consumption was prior to the COVID zero lock downs. So, I think that will definitely have a tremendously kind of price positive and bullish effect. I think the challenge is that we're still I would contend very new into this, you know, latest regime of the oil market. If you can think about the last regime, kind of starting around 2014, when you had that massive buildup of shale production growing at any price level, cratered prices, the new the new normal for, you know, as far as anyone was looking forward was in that kind of \$40 to \$60, shale band range. And that lasted, basically from 2014 right up until 2020 and I think a lot of people expected it to last longer. And a lot of the things that people said were inevitably kind of flawed or couldn't continue about shale really that point got punctuated and fast forwarded by the pandemic shock. But I think now, a lot of the reasons that we're still talking about the US shale can't produce faster, for instance, I think as well, we're still in a relatively new period of US shale producers finding this cashflow positive kind of religion. And I think it's still too early to say if that's going to be a permanent feature.

I think the other thing that's important here is that when people think about US shale growing slowly. I think they think about it actually growing slowly, and it's still going to grow faster than any other producing jurisdiction on the planet. It's just probably going to grow at somewhere in the ballpark of half the speed that it was growing prior to the pandemic. And I think, just for context, you know in 2018 when Brent prices were around \$60 bucks a barrel on average for the year. US shale or US total liquids production growth grew by something like 2 million barrels a day or more than the entirety of global demand during that period. That was an insurmountable wave of supply that the market could never work through in a way that, you got three digit oil prices, but now it's going to grow more in the ballpark of 500,000 to a million barrels a day, which I think is both a more sustainably kind of healthy pace of growth for the global oil market. But I think it's also still extraordinarily fast relative to what most other jurisdictions historically have ever seen. So, I think that would be my point is that I'm less certain whether or not this will be the permanent new normal, or if this is just another phase. And after a period of high prices, and after some of these supply chain bottlenecks in the US begin to unwind, we couldn't begin to see some of that appetite for growth at any cost again. I think it's, the oil market is cyclical, psychology is cyclical, and I and I'm not yet convinced that this is the final end of history chapter of US shale.

Erik: Let's talk a little bit more about the global supply factors that I see as changing as a result of the pandemic, in some cases and before the pandemic in other cases. Nobody has ever been completely sure exactly how much spare capacity OPEC had. I would argue until very recently, when we found out by force that oh, they've just run out of spare capacity and they haven't completely run out. Saudi Arabia, United Arab Emirates both appear to have some more spare capacity. Saudi has admitted publicly they have at most another million barrels beyond what they're already producing. And they've said they have no ability ever to grow beyond that. They say 13 million is the absolute most they could ever do. A lot of people that I've talked to in the industry are skeptical that they could even do that what I've heard is, maybe in theory, they could really turn everything on to get it at that point, but maintenance requirements and so forth would prevent them from sustaining that.

Meanwhile, the rest of OPEC is under delivering against what they used to call their production quotas. Now they're calling them production targets, which I find very interesting, just the change of terminology there is kind of telling to me. And the way I'm seeing this is, even before you consider any of the geopolitical conflict with Russia that's going on. Before that happened, we were in a situation where the world had run out of spare capacity, with the one exception that US shale was growing in leaps and bounds. It was recovering brilliantly from the pandemic and my hat is off to everyone in the American shale patch who pulled that off. But at the same time, all of the analysis I've read, and I think what you just echoed a moment ago, is they've kind of done what they're able to do. And it's not likely that we're going to see a million barrels per day per year of growth going forward. So is there anything else on the global horizon that could be turned up in order to provide more supply that I don't know about?

Rory: I think you've covered it pretty well there. And I think particularly your points that OPEC I think are well taken. I think we will likely get some more, you know, the UAE has been very ambitious and kind of open with the fact that they want to grow production. They are consistently one of the only members within OPEC that doesn't seem to want to cut back production, they want to grow, this caused issues in the very early kind of months of OPEC's attempted rebalancing of the market. But I think you're generally right and I think particularly, it's going to be hard to fill the hole that a halving of US oil production growth, and particularly kind of US shale crude production growth is going to be able to achieve. Beyond that I think you really only have a couple other major jurisdictions that either have the appetite or kind of acceptable geology at this stage, at least, to see growth. And one of them that, I'm actually writing a piece right now and it'll be published shortly on Guyana. And that, this massive new offshore potential that Exxon Mobil and its partners have found in deep water offshore Guineas territory. And I think that's going to be an example of something that we've seen is really, really interesting and different from what I think many people would have expected, prior to the pandemic and these fields are massive. It's probably one of the most successful offshore exploration experiences in history, arguably. And many of those projects were developed and kind of scoped at the bottom of the of the price cycle. So, a lot of these projects are building in \$25 to \$35 Brent breakevens, with top of the, absolutely top of the line technology, and all of this utilizing these FPSOs or these floating production storage and offloading vessels, with these tie downs on the bottom of the ocean floor. I think that is going to be what we're going to see more and more and more as of I think the next stage of exploration, kind of take the you know, goes underway. And I think that's why I'm less confident because I know exactly what's going to look like because a lot of this new technology is quite impressive.

You're seeing similar deployment in the deep sea waters off of Brazil, as well as where I am in Canada. The Beta Nord project recently received environmental approval from Ottawa and it's going to be a similarly large, deep sea FPSO type production system off the coast of Newfoundland and Labrador. So, I think those are kind of, those three countries I mentioned, Guyana, Brazil, and Canada are going to be three of the major non-OPEC, non-US production sources. But I agree that beyond that there doesn't seem to be a lot of readily accessible and attractive kind of exploration and production opportunities. You can always see that some of the production losses in OPEC countries like Nigeria and Angola could conceivably be reversed. It's just going to take the application of time, effort and capital, which at this stage seems unlikely. But if we had a period of a couple years of three digit oil prices, I think that that calculation could change, and I think that's where the outlook for supply is always going to be dependent on those other factors. And that's why I'm less certain that it's going to be a hard stop constraint. But I do think that to your point, it's going to require higher prices for longer in order to stimulate any kind of meaningful non-US shale supply growth because the market got used to effectively. I like to compare US shale growth with like that early stage of Uber and Uber Eats, where you had all of this capital destructive behavior that in the US shell patch case, you know, incinerated upwards of half a trillion dollars of investor capital in pursuit of what turned out to be ultimately uneconomic production. So, I think that subsidy is gone. And I think what we look back at, and it seems obvious in hindsight, but there was never really a sustainable \$40 to \$60 shale ban in the

first place, it just realized that way because of the way the capital is deployed. I think that this next stage is going to be much more interesting, which is the US shale patch is going to grow under the constraints of a currently kind of limited US oilfield service sector, given the fact that it's not just exploration producers that have cut back capital and investment. It's also all of their suppliers and supply chains that have done so as well. In many cases, even more to the bone than the EMP sector did. So, I think it's going to take a couple of years truly of these higher prices to rev up that engine once again and rebuild capacity, both through the US kind of OFS supply chain, but also through the rest of the world. And I think that does mean higher prices are required. Otherwise, I just don't think we're going to get the supply. So, I think in that way, I very much agree with your point there.

Erik: Tell me a little bit more about these three projects, starting with Guyana in terms of the time to market. Let's say that we have \$100 oil prices. So, the market is there ready to buy this oil. In the next two to three years, how much of that could come online?

Rory: Yeah, so in Guyana's case, it's really interesting. So, you already... uhm the first oil offshore Guyana was produced in December of 2019. So, this is an extraordinarily new oil producing region. Since then, that was the Lisa phase one project. Lisa phase two actually started earlier this year in February. So, we have the two Lisa project now operating with a capacity of about 360,000 barrels a day. Over the next couple of years, you're going to see incremental projects that have all been discovered scoped and essentially FID. They're going to come you know, increasingly kind of one a year almost. So you're probably going to get growth in Guyana somewhere in the ballpark of 200,000 barrels a day on average of annual gains over the next half decade. And just put in perspective, which, it doesn't sound like a lot relative to the million barrel a day swing we're talking about in US shale. Certainly nothing in history has ever been quite that impressive.

But, to put in context, that 200,000 barrels a day of annual incremental growth is about the same pace that the Canadian oil sands saw in its heyday of growth between 2010 and 2015. So this is another you know, over the next half decade, Guyana is going to add a million barrels a day of production relative to the beginning of this year. And Guyana is going to go from a country that produces virtually no oil, there's less than a million people in Guyana. And you're going to go from essentially zero oil to the largest per capita producer on the planet. So not only are you going to have, it's going to be a major component of the supply story going forward, it's also going to be likely the most acute accelerated resource curse experiment ever conducted in history, because there's this big question, how are they going to operationalize and manage the governance around that very literal windfall. RICE data, a major oil consultancy estimates that over the next kind of between now and 2040, the government take is going to be on the order of \$150 billion US, which is you know, this is a staggering amount of money for what was previously one of Latin America's most impoverished countries. So it's going to mean massive things for Guyana. But it's also going to mean kind of each and every year if we're growing at, let's say, a million barrels or 1.2 million barrels a day kind of supply growth, which I think the optimistic kind of stable case, 20% or roughly of that is going to be Guyana. So, I think everyone is going to become very, very familiar with Guyana as an oil producing region. And that's

exciting because it's new and it's very rare that the oil industry actually runs into a completely new producing region, even the Permian Basin, it was a new rock, but I think everyone was familiar or knew ways to utilize that rock but everyone was extraordinarily familiar with the geology of the Permian, and obviously oil and gas in Texas. Very, very different story in Guyana, so I think that's going to be fascinating to watch.

Erik: Okay, but I just want to keep this in perspective, because if I heard you right, what you're telling me is optimistically the best we could hope for is over the next five years, Guyana might be able to produce enough oil to offset the US SPR releases stopping which has been about a million barrels a day until recently. It's actually been throttled back a little bit in the last few weeks, but we're talking about the unsustainable release of US SPR oil has to end. I mean, it at some point they'll run out if they don't end pretty quickly. They're supposedly ending that by the end of this year, it sounds like the growth in Guyana would take several years just to make up for that. Am I missing anything there?

Rory: No, that is correct. Now again, I think, you know, you add let's say 100,000 barrels a day of growth from Canada or 150,000 barrels a day of additional growth from Brazil. I think what you're going to see increasingly is a much more distributed kind of decomposition of that supply growth. In the decade prior to COVID. It was like two thirds of every incremental barrel produced globally came from the US shale patch. Again, that's a crazy amount of oil. So, I think for anyone that expects us to see a prolonged period of time like 2014 to 2020 again where you had this wave. This kind of massive tsunami of US shale crude that was constantly holding prices down, that I just don't see happening again.

I think the only way to your point, the only way you get an environment of lower prices that lasts for any period of time, in my mind now is going to be because of something that's happening in the demand side, maybe these Chinese COVID zero lock downs persist much longer than anyone expects or maybe we have some kind of, you know, next stage evolution or permutation of the COVID virus or things that would reduce the demand side I think still remain large risks to the outlook given that, at the beginning of this year, I don't think anyone expected China to hemorrhage 2 million barrels a day of crude demand either. That I think is the risk. But on supply, there doesn't seem to be any massive risk lurking around the corner, that you could see us shale supply growth explode into next year. I think what you'd need to see is you would need it would need to come in stages. Right? You would, because you have, I think the two biggest factors right now holding back us shale production growth are US oil production growth more broadly, is this kind of compounded factor of investor imposed cash flow or investment discipline so there is just less growth. You know, no more growth at all costs, profitable barrels only in cases of producers like pioneer, Sheffield has very clearly stated that, doesn't matter if oil is at \$300 a barrel, he's not growing more than 5% every year.

I think that that is a question whether or not that type of sentiment remains in the patch. But even once that begins to weaken, if it does then you move on to the fact that there remains extensive supply chain bottlenecks from everything from frac sand to oil country tubular goods or steel pipe used in these projects, has actually never come back down at the beginning of

COVID or I guess partway through COVID everyone was watching steel prices is this massive, COVID bottleneck that put these prices to multiple times previous all time highs, but then collapsed and came back down pretty quickly mostly on the erosion of confidence in China's real estate sector. But you know, oil country tubular goods or the steel pipe never came back down. So not only do you have these, you know, the steel price first, but then you had the fact that these CMS manufacturers were never able to catch up with a steel pipe demand. And then you lost additional steel pipe shipments from Russia and Ukraine. So that I think is another piece. And then finally labor, which is this other big factor of for so long, you had seen people increasingly leave the oil patch during the downturns and never return.

So even right now, you've seen some I've seen some stats recently that like in Texas's oil and gas sector you're at like 0.8% unemployment, but the overall employment rate in the sector has fallen markedly. So there's just less people in the sector. So we're going to need, again, a prolonged period of time of higher prices to pull people back into sector, to pull capital back into the sector for all of these supply chains. And the final supply chain, which I think could in many ways be the stickiest is this idea of, as mentioned in the OFS or oilfield service sector, you've seen a general erosion of capacity and pressure pumping or the kind of final stage to complete these, these horizontally drilled wells, you need all this pressure pumping capacity. And that itself also kind of withered for a while through the downturn in 2014 to 2020. And then in 2020, I think many operators essentially just threw up their hands and said well, we're definitely not going to put more money into this now. So even when you had high oil prices, and the OFS sector saying, hey, maybe now I should start increasing investment. Oh well, then all of the EMPs essentially pulled a pioneer and said oh, we're not going to grow under any condition. That's not a great sign for future demand for oil filled service kind of activity or just generally services. So I think it's going to be this multistage debottlenecking that's going to need to take place. And in all of those moments, you're going to need high prices. Because at any point when the if prices collapse, and one piece of that supply chain system kind of re-slackens, it just it just delays any of the capacity to and bottleneck.

Erik: Now a lot of what you said is that the economic regime will be different in the 2014 through 2018 period where there was so much easy money courtesy of what I think was reckless monetary policy. That it was so easy to finance these shale projects in the junk bond market. You could get money very easily to do just about anything, I agree with you, that's going to dry up. In fact, it's already dried up, it's not going to be so easy. But let's assume that after a year or two, if we get into the energy crisis that I think is coming, it's not going to be \$100 a barrel oil anymore, it might be \$150 or even higher. At that point, it becomes a national emergency and perhaps under a different political leadership, the energy policy is different. And the government is saying look, we're going to support our oil industry because we need to get out of this pickle. We're going to subsidize it, we have to. So let's pretend that the sea of money is there again, because I think the sea of money will eventually come when we get to the point where we get a true energy crisis and I do think that's coming.

At that point helped me understand what's possible then in terms of shale growth, because my understanding of the whole 2014 to 2018 event is that it was largely based on what some

people call either high grading or sweet spotting where the idea is you pick the very best of the test holes that you drill, and you only actually produce the wells and complete the wells that are going to produce the most oil for the cheapest amount of money. As I understand it, most of those high grade sweet spots are all used up. And I don't know how many of the not so high grade not so sweet spots are left and I don't know how not so sweet they are. What if we did have a mountain of money available. Can you grow the US shale patch up to 20 million barrels a day if you needed to or is that geologically impossible?

Rory: 20 million I think would probably be out be like a heavy lift. But I do think that, and you're absolutely right that we've seen this actually in multiple episodes through the US shale patch where you have these price downturns, and people essentially jump back and the pullback activity and essentially the rig weighted productivity of wells skyrockets because the only wells that are producing are the best things left. So I definitely do think that's true but there is also this general trend line of productivity of companies kind of learning to do more with the technology and the kind of skills they have. So this whole learning by doing philosophy.

So I think in all oil but I think particularly in kind of a system like US shale, where in many cases, it feels more 'manufactury' than it does kind of classical wildcatting, then it really is about process, it's about optimization, it's about, getting the right balance of pads, and kind of working through all the issues that the sector had with kind of, you know, child and orphan wells. And, there's just a tremendous amount of accelerated learning going on. So, I do think that, the geology of course will decline over time. But hopefully, the goal here is that both the kind of skill set and familiarity with the geology will improve kind of all else productivity. But then as well, this windfall of money that kind of we're assuming this scenario, would likely have to start on the oilfield service side to rebuild all of that capacity back to a stage that you could actually complete these wells to a degree that you could get million barrels a day plus crude production growth again.

I think it's to me, it seems very unlikely that we will get that kind of world where you have the 2018 kind of style of growth again, it seems unlikely that capital markets or equity investors would kind of, you know, stomach it. But I also don't think that as we continue through the end of the decade, that is generally when people begin to assume that the demand begins to weaken. And I think, with the challenge we've seen over the last call it three years now has been really hard to get an underlying read on what the exit trend of COVID demand is going to be. Because every time you, you kind of think, oh we're back. We're almost back to pre-COVID levels, as we were at essentially the beginning of this year, we are getting just back close to the kind of that pre-COVID high, then China lock down again.

So, it was it was the next stage of what the COVID shock look like. So China was quite, you know, it was essentially the demands savior in many cases of the world in 2020 and into 2021. Then as the rest of the world kind of began crawling out of the COVID demand hole, then China decided to take its turn on the downside. And it was in many cases, almost as dramatic as that initial COVID demand loss in 2020, but just happened to one country. And I'll be it kind of always the largest incremental kind of demand growth engine. So I think there's this big open

question of like, one when does China reopen its economy in earnest? What does that look like and do you have the kind of, voracious pace of growth you had prior? I think these remain big questions.

And frankly, I don't know, I think I think at this stage, no one really anticipated the scale or persistence of the COVID zero policies as we've seen it. The kind of classic refrain is that it doesn't make any sense. So it has to end which I agree, it doesn't make any sense. It doesn't seem effective. It doesn't seem like it's politically sustainable. But it's also been going on now for, you know, going on seven, eight months, which is much much longer than I initially expected it to last. The one of the best comparisons I saw was the kind of drawing a parallel between COVID Zero, particularly given the fact that the party has kind of tied its fortune to it so directly, and Xi Jinping specifically has kind of brought on this policy in a personalized way. And drawing a parallel between that and the one child policy where that was also something that everyone knew, for a very, very long time that this was an unsustainable demographic policy. But it still took years and years and years for Beijing to eventually reverse that policy, because of the politics of it, because they needed to essentially, gradually change the narrative before the policy was eased, so that they had that cover.

And I expect at this stage that we're going to see something similar with COVID Zero. We could see, we could be starting to see the pivot of that narrative now. And as we were chatting earlier, there is this optimism now. This week at least, or at least last week, there's this optimism about China opening, but I think it still remains to be seen one, whether or not you get some kind of blowback, given the high COVID cases in China right now. And then on the other side, if they're turning the boat, how long is it going to take to kind of fully do a 180 here? And I think we're probably talking more, again, charitably. And to kind of this the first half of next year maybe Q2, something like that. But I think there's just a big question of what that looks like on the other side.

Erik: Well, I completely agree with you that China reopening is the big catalyst that I think will be the event that brings on the energy crisis that I fear is coming. Let me just push back on a couple of things that you said, because I personally am starting to question some of the Western reporting on this, particularly around the language of COVID zero. Now, let's go back to the China reopening rumors that started two weeks or so ago. The rumor that came out with somebody who seemed to be very well connected in the know, said that they had heard that a committee had been formed to plan the reopening. It wasn't that they are about to announce the reopening, it was a committee had been formed to plan the reopening, and that they were targeting March or so. And they named the guy who's very well connected in the Chinese Communist Party, who was going to head up the committee. That, to me still sounds like credible Intel. It sounds to me like it makes perfect sense. China plans things well in advance the fact that they're starting to plan how to do this. You know, it all logically makes sense.

And then Bloomberg over the weekend reported well, the hopes have been dashed, because China just announced that that's not really what's happening. They're committed to their COVID Zero policies. And I thought, wait a minute, wait a minute, they didn't say, and I don't speak

Mandarin, and I only speak enough Cantonese to order dim sum. So, I don't know exactly what she really said. But I can't find anywhere in any of the reporting. Any buddy quoting any Chinese officials saying we're not planning the reopening or the rumors about the potential of a march economic reopening are false or anything like that. All that they said is they're committed to their zero COVID policy. And when I think about the way government's announced things, of course, they're going to say that if they were ready to announce their reopening of the economy, I would expect them fully to say we are completely committed to our zero COVID policy, which has been a great success. And furthermore, we've now reached the phase of that zero COVID policy where we're going to reopen our economy with cautious controls in place in order to protect the public health and so forth under COVID Zero. So, I think that the press is equating China's statement that they're committed to their COVID Zero policy as refuting or disagreeing with the prediction that they're also planning the reopening. And I don't think those are incompatible things. Am I missing something?

Rory: I think part of the challenge here is that you've got the report, you've got the kind of policy on one side, you've got the reporting on another, and then you have the reaction from the reporting from there. And I think that, like you were saying, or roughly two weeks ago, that initial kind of rumor that was circulating on Chinese social media that kind of started this latest wave. Initially, when I first read it, it was reported, as you know, this was a committee that was taking place. It was again, it wasn't quoting exactly, but the tone was, this is this committee that's taking place right now. And they're going in there, and they're exploring reopening now. And that was kind of later revealed that okay, this is, you know there it's kind of a plan for a plan later to do the planning to reopen. But I think right now, I think all this to me reveals, I don't think that we should be reading too much into either the reopening optimism or the kind of reopening pessimism, I think that until we get to see, because I don't think it's going to be a subtle thing. I don't think that this is going to be something that, various Chinese Communist Party whispers are going to be kind of, you know, here or there and these are the specifics. I think that using that same paradigm, that same framing as the one child policy, you're going to have a concerted, verbose shift of tone here.

And I just don't expect that to be something that. Even if it is, if they're talking about right now, I don't think we're going to start hearing anything. At least until they're through this current wave that they're facing in China again, given that it's the worst that thing, you know, the worst cases we've seen since the initial lock downs began in April. And it seems to me like very strange timing to be pressing something kind of positive about reopening right now. But I also don't think that it's, you know, not in this domain, it's never going to happen. I just don't think we have enough information at this point to kind of say, Is this a March thing is this June thing, which all the mean very, very different things for oil balances which is what we're talking about here.

Whether that demand comes back in Q1 of next year means a very, very different thing that comes in sometime in the second half of next year. And I'm like we were saying earlier, kind of in this loose Q2 beginning to renormalize. But then again, I think it becomes a second question of, not only are they going to you need to get two million barrels a day, roughly give or take back to pre-COVID or COVID era highs in China. And then there's the question of, well, what's their

steady state of kind of growth coming out of that after that, because before, you're seeing 400,000-500,000 barrels a day of kind of annual growth. And if that also is slower, well, that does begin to help compensate for some of the structural loss of accelerated pace of US shale.

Erik: Now, if I were China, if I were Xi Jinping, it would be very clear to me that I know the reopening the full reopening of my own economy is likely going to bring on a global energy crisis. Therefore, what I would do to plan ahead for that is I would figure out how much time I've got between now and whatever the target reopening date is. And I would use that time to fill every possible nook and cranny of the Chinese SPR and build some more SPR if they have any capacity to do that, in order to stockpile as much oil as humanly possible before the reopening, knowing that the price is going to go up when they do actually reopen and bring back all of that demand.

We've already seen Goldman Sachs just this week published a research note saying essentially, it appears that China has already begun to replenish its SPR by buying oil in advance of their reopening that Goldman thinks is already happening. What I don't know and I'm hoping you can fill in the blanks here is how much capacity does China have left and it's not a published number so we've got to go by guesstimate. But, how much capacity could there be if if let's pretend that I'm right and China is going to use the time between now and March or whenever it is to refill every bit of SPR capacity they have fill up the tanks to the brim with brim, so to speak. How many barrels is that do you think that they could consume just restocking before they reopen?

Rory: Yeah like you said, it's always hard to get a good sense of exactly what China's SPR capacity is perfect, because it seems like they keep building new tanks. But I would say that, my assumption here would be and we've already seen China kind of move through various phases this year of effectively building and drawing down their own inventories. And it's also muddled here because the even the commercial inventory in China is kind of quasi-strategic and state run that even if the crude earlier this year wasn't going into the SPR, that China's SPR, it was still, Beijing directing these Chinese state owned companies to buy crude in excess of refinery runs, which is what we were saying earlier.

And, the latest numbers out now do seem to indicate that you are beginning to build crude inventories again because the crude, the total crude available in the economy is more than what they report, they're running through the refinery. So that's kind of how we get these implied builds and I expect, you could probably honestly have, you know three, four months here of a million barrels a day or so, probably less on average, given that this is going to be a fairly volatile series. But I think that you could have a decent amount of growth there. The way I generally do my balances, though, and I'm kind of building a global oil model is the mostly focused on the refined products on China and less on the kind of availability of crude, and on the re-availability of refined products in the economy and the kind of output of Chinese refineries and their net trade. That's the side that still seems down rather markedly kind of in that 1.5 to 2 million barrels versus the kind of COVID era high. But to this, I need to do more work to kind of

get a better sense of how much ultimately we could see go into China's SPR. But I wouldn't, you know, nothing at the scale of where they drop their demand out of this latest cycle.

Erik: Let's move on now to a couple of events on the horizon that pertain to Russia specifically. Starting on December 5, the European Union will embargo all imports of Russian oil. And then at some point after that there's this discussion of a price cap, that would be jointly under the guise of global oil guru Janet Yellen somehow imposed. Frankly, I think that one is so silly that I don't even pay attention to is I don't know what the timing is. But in terms of those two events, especially with respect to the December 5, European Union, a lot of analysts seem convinced it's going to take a whole bunch of Russian barrels off the market instantly. I don't agree. But how do you see it?

Rory: Yeah, so just to kind of is scope the kind of various dates we have coming down the line. So you're right on December 5, there is going to be this implicit embargo. The EU is essentially banning all import of seaborne Russian crude oil. Certain carve outs for pipeline connected refineries that essentially don't have any other choice. But seaborne is kind of the this main focus here. So what's going by tanker and the way the price cap comes into this is essentially, even if the EU has banned the import, there's this additional layer of the ban, or the kind of that what happens on December 5, is you also get this prohibition on Western, maritime service companies, the most notable of which and the one people usually focus on his insurance. You can't insure or kind of provide services to Russian tankers carrying Russian crude after December 5, the way the price cap comes in is there will be exemptions to that ban on service provision, if the crude for sale is under some, as of yet decided cap and what the one thing I'll say here is, I will I've publicly come out at the beginning of this saying that I don't think the price cap is a terrible idea. But I do think and this is and we're going to see parallels to this when we get to the SPR later. I do think it's a interesting theoretical argument that has been haphazardly and terribly executed.

And the reason I think that is that I see this price cap discussion as essentially the next stage of secondary sanctions application. So when you looked at how, how Washington sanctioned Iranian crude and Venezuelan crude, it was essentially no one can touch this stuff, and there was always this, this Sword of Damocles. Essentially, that you couldn't be too aggressive on Iran during a period of, let's say, high oil prices, like in late 2018. Because there's this concern that it would kind of prompt, deleterious or politically, bad for the White House, price spikes and oil.

So the way that you could theoretically both have your cake and eat it too, is that you could say, well, the crude could still flow but it's going to be capped at a certain price and the rationale for why any producer would accept that price is that the alternative was essentially be a full applications of secondary sanctions and then not getting any revenue at all and potentially losing, and just shut in that productive capacity. So in this in this scenario, if you had a price cap functionality for, let's say, Iranian barrels, you wouldn't have seen Iranian production collapse in the same way that led to some of the price increases, you would have seen it continued to flow just with less functional money going to Tehran. But I think where they dropped the ball on this

is a couple places. One on the marketing of it. I think the marketing and the political messaging around this should have always been around. This is an evolution of how we view sanctions policy, rather than what both Yellen and other European leaders have said, and this is what really got OPEC all worked up about it is that this is the application of a quote, buyers cartel. I think that's where this becomes super problematic. Because I don't, I don't think that's the correct way of thinking about it.

And furthermore, I think that it was, it was always going to be really, really hard to enforce a policy like this, because it's already really hard to enforce a blanket ban on crude purchases, like in Iran or Venezuela. Let alone essentially needing an army of forensic accountants to come in and verify the exact contract terms, which you know, there are so many places for subterfuge and kind of deception here that and the incentives to do so are literally 10s, if not hundreds of millions of dollars. There will be cheating and the way we've set it up, or the way the policy has thus been framed, does not make it particularly easy to catch cheating. And I think one of the things that's been most frustrating to me, is twofold. One that from the get go, Washington said that they would never consider applying secondary sanctions if the price cap was violated. There was always this perception that the Europeans wanted to go harder on Russia than Washington did. And that was because I think largely, you know, DC is still concerned with price spike effects and kind of taking too much Russian crew off the market. So they've kind of been working in every turn to kind of weaken, I think the effective curtailment factor of Russian crude. So I think that's the one thing, so no secondary sanctions, no big stick at the other side.

And the other thing is that the EU, because they don't want to reopen their sanctions package in the way that has all kind of been negotiated over the prior year. What they should have said was European countries and companies can import Russian crude if it's below the cap, because it makes a lot of sense because it's close, you know, you have tanker access, you have established relationships, etc. But they said no, because we've already decided that the embargo is going to be enforced. And now we're tacking the price cap theory on top of it, you know, any chance you had at having a reasonably verifiable close to your kind of area of interest or area of comfort, at least, that's essentially been dashed. So now it's going to be European and American accountants trying to validate transactions between Russia and Saudi Arabia or Russia and India, which is going to be just an order of magnitude more difficult than the already insurmountable challenge of trying to do the same thing for shipments to from Russia to Europe.

So with that said, I think I've officially retired my support of the price cap, because I think, again, while it's an interesting theory, the execution is kind of where this is going to be made. And that execution has been very, very poor. To your question about how much are we going to lose? I agree, I think that there's more of a chance that we lose crude at this stage than we gain it. So all else equal, it's still going to be a bullish event on December 5 from a fundamental perspective, but versus expectations, I think it's going to be a bit more of a wash. You know, part of why we saw such a massive flip in the market this year was we had, by my

understanding with the exception of maybe COVID, the largest pivot and expectations of balance impact in the oil markets history.

In March of this year, we didn't think that China was going to lock down and hemorrhage 2 million barrels a day of demand. And we did think this was straight from the IEA that by the end of the year, even sooner after that, that Russian supply was going to fall by 3 million barrels a day. Instead, we lost 2 million barrels a day of Chinese demand. And we kept almost all of that Russian supply so that everything else equal was a net 5 million barrels a day swing and expected global balances. I think that alone justifies the fact that we've seen, the levels of volatility we've seen this year. And I was saying to you on a different occasion that in some on some levels, it's actually a surprisingly little amount of volatility for how much the, call it the base case forecast, has shifted over that period.

Erik: That's interesting because I actually think that December 5 could be bearish oil price prices for the reason that so many people have this expectation that a whole bunch of Russian crude is coming off the market. And I just don't see why that would occur, what seems very obvious to me is Russian crude can no longer be sold to the European Union. That means Saudi Arabia no longer has competition, they raise their prices to Europe. Europe has no choice but to pay them because its sole source at that point. And Russia simply sells all of its oil to India and China, maybe at a slightly lower price than Europe is paying Saudi Arabia, but not a whole lot lower. And nothing really changes in terms of global supply and demand. What am I missing?

Rory: So I think the argument for why the, you know, you'd see more of a demand loss...

Erik: And I forgot to add in there that I don't believe that any of this insurance and shipping nonsense is going to work. I think that China is quite capable of buying or leasing or you know, coming up with their own insurance company, or buying more tankers or doing whatever they need to do. If the opportunity is there for that Russian oil to go to China, they'll find a way to get it there.

Rory: I think that's probably right. But I do think is that it's also a staggering volume of crude. Like it's going to be one of the largest logistical pivots in the oil markets history. And I think largest quote on history is going to be just a recurring theme here ever since the beginning of 2020. But like the scale of this is massive, and it's a tanker traveling from Baltic ports to a European country, you're measuring that journey in days, maybe a week round trip. The same trip, that same tanker from that port to India or China is like months, right? It's on a round trip basis. So the reason why the concern is there about the loss of supply, is because the longer a tanker has to travel, the less effect it's essentially like I like to view it as almost like you're narrowing a pipeline, that same pipeline can carry a lot more a shorter distance than the same pipeline over a longer distance. So I think that's part of the concern there. Now, to your point, I do think that this insurance and everything, there will be workarounds, and you've already seen massive shifts in the ownership structure of many super tankers, and this kind of the so called Shadow fleet is bulging. But that still needs to carry out of Venezuelan shipments and Iranian

shipments. So I think that's the concern is that there's going to be a logistical snafu here. And I think that's the most likely case. I think that if we do see an impact, we're going to see a relatively kind of sharp impact in December, maybe January. And in which is similar to what we actually saw with the initial losses in March and April. Like the largest loss of Russian supply was in April, which is essentially after that first wave of self sanctioning, then it took a little while to reestablish which customers were selling to etc. I think that is likely going to happen here as well.

The longer term story, and this kind of again, goes back to this, global supply insufficiency narrative is that even if we can even if Russia can maintain shipments in the near term, it's the longer term that becomes a question of how much can they support on the production side, absent all of the oilfield service company and you know, Western EMP both capital and expertise applied to these fields. They were large factors in turning around Russian fields post-fall of the Berlin Wall. And I think they've always been intimately related with Russian production. Now, you could see some help coming from let's say, Iranian petroleum reservoir engineers or the Chinese. But I think no one is debating that the scale is not and the kind of capability is not the same as if you had full access to Western capital markets and Western OFS providers.

So when it gets more of a long term grind that I think is the kind of my call it oil price bullish view of Russia is, even if we have a sharp hit to supply after December 5, I think it's likely to work itself out because like you were saying, I think crude finds a way. You've already seen people discussing trying to rapidly build up pipeline infrastructure between Russia and Asia. I think, this will always find a way to market. But I think the logistics and the kind of extra travel time create this kind of intertemporal pinch point that I think could be over interpreted. I think while it will likely be bullish immediately, I think the ultimate impact will likely wane in terms of its intensity.

Erik: Well Rory, you haven't disagreed with me as much as I expected you to, but I have a solution to that problem. Let's move on to the Strategic Petroleum Reserve where I'm sure we can find some disagreement. I think though it's really important to frame this and put it in context first, because really the reason that I disagree with you and Dr. Anas Alhaji and a bunch of other very smart people in the oil industry is not that I actually dispute the substance of your arguments is because we have a very different philosophical belief about the purpose of the SPR, why it exists, what it's for, and so forth. If you were to presume that the purpose of the SPR includes managing gasoline prices, for the sake of protecting the US economy during times of geopolitical tension overseas, then the arguments that Anas Alhaji has made, the arguments that you've made, I think are spot on.

The reason that I'm in such strong disagreement is I don't think that's what it's for. I think it's entirely about national security and protecting the country against a situation where you get into a war where energy is withheld as a tactic of economic warfare. And frankly, I think that's coming. So I want to really focus on that aspect, because you've done so much excellent writing and other interviews. Before we move on, just tell our listeners for the perspective that you've already written about, which is assuming that the purpose of the SPR does include managing

gasoline prices, and so forth, which I don't think is what it's for. Where's the best place because we don't have time for it in this interview? Where's the best place for people to come up on your views on that?

Rory: Yeah, so I have written extensively about my kind of views in the SPR on commoditycontext.com, my substack. Employ America and analysts there have also done a lot of really, really interesting work at trying to kind of reimagine the SPR and its application as an asset. And then I have also been on a couple other podcasts kind of talking about this most notably, Bloomberg odd lots podcast where I was on with my friend Skanda talking about this and kind of how this policy could be used to help blunt or ameliorate some of the kind of worst impacts of the energy price spike this year.

Erik: Listeners, you'll find links in your research roundup email, to find the writings and podcast interviews and so forth that Rory just mentioned.

Let's move on now to my view of this is a little different than it seems like most people see it. I think the reason we need the SPR is so that if we get into a situation where a war results in energy access being cut off to the point where it's not a question of price, but Russia is unwilling to sell any of its oil to the west, because they're trying to use withholding access to energy as a tactic of warfare. I'm not going to go quite as far as predicting that that is certain to happen. But I think that the risk of a conflict between the United States and Russia escalating to that level is higher than it's ever been before.

So the reason I think we need the SPR is because it seems to me that if Russia really wanted to get dirty, what they could do is, and frankly, I think they're already starting it. The first step is to play President Biden, get him to drain down the SPR as much as you possibly can, in order to reduce the cushion that we have. And then at some point, when this war heats up, you say, look, we've already made a deal with China, behind the scenes, we've also gotten friendly with Saudi Arabia after President Biden didn't exactly make the best of friends with Mohammed bin Salman, we've got a plan, and we're going to sell our oil to China and India and it's not for sale to you guys at any price. Tough luck! If they were to do that. And if you really want to up the ante, if they were to infiltrate the US Green movement with FSB spies or operatives, or whatever you want to call them. And just fill some American greenies heads up with the idea that the way to be a climate hero is to blow up the Keystone pipeline, not Keystone XL, the one that didn't get built because President Biden, basically as his first act in office cancelled it. But the existing Keystone Pipeline, which is the conduit that provides most of the import of desperately needed Canadian oil, because it's heavier oil that can be used as blend stock, in order to make the lighter US shale oil refinable. If you were to blow up the Keystone pipeline or if you really want to get into this, if you were to blow up a couple of US refineries and take out refining capacity. I think it would be fairly easy to persuade American green activists to do that. The FSB could provide them with some explosives and some training, teach them how to do it, and let Americans do the dirty work on behalf of Russia.

I'm not predicting these things. I admit that I'm thinking out of the box here in terms of risks, but I think this is a time where we need to be concerned about these kinds of risks and we need very much to focus on energy security. Draining down the Strategic Petroleum Reserve at a time the first time really, in 40 or 50 years or more than that. There seems to be an imminent threat of direct military conflict between the United States and Russia seems insane to me. Do you just not see that as the purpose of the SPR or why don't you and most other people in the industry seem to think about it that way? Am I missing something are the risks that I see not really there?

Rory: So I'm going to break this into a couple of different pieces. And the first thing I'll say is that I, my views are I also believe, relatively anathema to the majority of the sector. I think I'm a bit of a black sheep on this particular point, I think most people would say that the government shouldn't be interacting or trying to intervene to support the market right now. But I think the reason that I'd split it in two here is I think there's a theory of the application of the SPR, which I think I'll discuss, kind of in longer terms here. But the other side of this is the actual execution, this is very similar to the price cap discussion earlier. I do think that some of the actual execution of this SPR release was fumbled.

So in theory, let's talk about that first. So in theory, the rationale here is because I actually agree with you that I think that national security should play a large part of this. And that's before I came to energy, my background was much more in the security space. I kind of came into the Econ side by happenstance through energy security, in a funny way here. But I think of it more as if we got to the stage where this kind of really terrible scenario that you kind of depict or kind of illustrate kind of plays out. Now you have a full blown kind of energy crisis in North America on US borders, onshore us, I don't think the SDR is going to go a huge way towards fixing it for a couple of reasons. One the SPR, you can't draw down super, super, super quickly. Now, there's debate over exactly how quickly you can draw it down. But again, I think this latest release is illustrative, the release for this latest SPR release 180 million barrels peaked out at about just over kind of 1.2 million barrels a day of drawdown, which is really, really fast. Again, that's about the entire production capacity of Oman give or take. So it's a lot of crude, I think that should be stressed. But, Russia and Saudi Arabia each produce 10 plus million barrels a day. So they were talking a drop in the bucket, if we're, if we were looking to kind of offset a sudden stop.

A couple of things, you talked about kind of attacks on pipelines coming from Canada now. You know, the original Keystone lines, some of that does get all the way down to the to down to the south, down into the Gulf Coast. But a lot of it kind of gets dropped off along the way in the Midwest. And the vast majority of Canadian crude actually transits via the Enbridge mainline into the Midwest and kind of being consumed, you know, through the Midwest region and pad two, whereas it'll be very, very hard for US SPR crew to make its way back up there. It's very much designed to fulfill and offset feedstock loss to Gulf Coast refineries. So I think, you could have a little bit there.

But I think the other thing you had said was around refineries, attacks on refineries. And I actually think that that's probably actually the number one big concern right now because I was

saying earlier that I think this year started as a an upstream crisis, and very quickly evolved into a refined process crisis and a refinery bottleneck. So the other thing here is that if you did lose a US refinery, two things would happen. One, we couldn't really offset it with the SPR because the SPR is crude. And if anything, they would actually hit crude demand. So you would actually need less SPR all else equal anyways. So that said, and I think where I do agree with you is that this should be thought of as whether or not national security or more specifically, I'll call it kind of national interest, which I do think is kind of a blend between both national security kind of physical security and this idea of economic security, because even in the case of like the 1970s crisis and the Arab OPEC embargo. The goal was to hurt US consumers through the economic factor, rather than literally freeze them out of their house or whatever, right? So I think, in this case, I actually think that the best way to offset that risk is actually by being proactive with the SPR rather than reactive. I think this is where I actually think the theory of the Biden administration's release in March when it was, this is immediately after the invasion of Ukraine, people this is again, in the context of the IA was predicting a 3 million barrels a day loss of Russian crude, which in many ways is actually the scenario you're kind of discussing, right, you know, a massive loss of Russian supply. That I think is actually that's the scenario that the Biden administration initially came to this decision with.

Now, where I think the administration fell short is that as a crude trader no narrative and the oil market last all that long. And I think that any effective policy framework aiming to dampen or secure, to improve the state of the oil market for the benefit of the US economy in the US, you know, national interest needs to be more flexible. So what when they agreed to it in March, I thought it was a great idea. But by June, July, after China's COVID Zero lockdowns and after we by that stage saw, we weren't going to lose 3 million barrels a day of Russian crude. This is that 5 million barrels a day swing I talked about by that stage, the SPR mostly should have been wound up, I think at that stage that really should have been done. I think you should be proactive and you should lean into it when you think it's going to be terrible. And that's back when Brent very briefly touched almost \$140.

So I think that was the scenario, as started and the rationale for why I think it should be used is people always think that people always focus on the release itself. So the supply to the market. But I think that what makes the SPR particularly valuable to the United States is not the volume of crude and the reserve itself. It's the combination of the fact that the US government is the largest effective discretionary supplier and demander of crude because on the flip side, after you empty the crude, you can also refill a lot of it too. So my hope would be and the way I wanted to see this policy play out was you released it heavy into the spot market, which, , reduced gas prices, reduced kind of the immediate consumer impact on what again, we were expecting was a massive loss of Russian crude. Again, in this kind of broader context of massive, 40 year plus kind of inflation highs and what you do is you immediately barrel for barrel offset that sale with a purchase down the curve. And the goal would be to essentially lift or flatten lift at the back of the curve or effectively flatten the overall curve. I think this has a couple advantages.

So the first is that in the very initial stages, when people were asking why US shale wasn't growing faster. A common refrain you heard, it's less talked about now. But I think it was very common at the beginning of the year was that it wasn't a trial, even if crude was at 120-130, it wasn't attractive to hedge because the curve. As you mentioned at the beginning was so acutely backwarddated that you couldn't really contract to a year and a half, two years out at all that attractive of a price. You were losing 30 plus dollars a barrel. So it wasn't super, super attractive. So that was one reason that you didn't see or they claimed they you know, you didn't see a big pickup in in that investment.

I also used to work at a bank, I use work at Scotiabank and a lot of what I did was talking to credit committees, and bankers really do focus on I mean, I think everyone the oil industry will take large issue with the idea that the future that when people interpret the Futures Curve or the forward curve as a quote, market forecast of the price. You know, it always gets groans in oil circles. But a lot of people do view it this way. And I think that's important for things like credit provision. So, you're talking about these companies can't hedges easily, they probably can't get bank financing as easy as if the curve was flat at 120. Were like what we saw back in 2008.

I think the final vector here is I think the single most important factor variable if you were to track anything that could eventually portend an erosion of US shale producer discipline, it's not the oil price itself, but it's the share prices of those companies. A lot of the argument for why you have cashflow discipline is that investors in the space essentially got a bath for a decade plus. all of this unproductive investment, etc, etc. But if those equities re-reached all time highs, which at the beginning of the year, up through June, they were actually kind of skyrocketing higher. And then this latest round of Fed tightening really pulled risk out of the market, the oil price fell back as well and those producers all fell back considerably.

So I do think that anything you could do to help juice the equity prices also helps. And I think, again, where we were saying that the curve is not a forecast, but it's often used like that. And I think that's an important kind of thing to think about, because the other way, not just in credit but the other way that analysts will use the curve is essentially as a way of building a discounted cash flow model for value in equity. So when you look back at the record all time high, kind of curve back in 2008, you weren't just pricing an equity model just flatly using the curve. It wasn't just pricing in \$130 spot, it was pricing in \$130 flat for the next five years. Whereas in the latest iteration, it was 120-130 spot, but you had massive erosion of that price over that the look of the curve. So if you could flatten the curve, you could bring it higher. You also have a direct kind of arithmetic input into equity values.

So that was my hope. Is that you have this it increases, it both decreases, preferential options costs for the producers looking to hedge, it will also increase their relative equity values, again, all else equal. And then it will also because well producers care about the curve, consumers just care about spot. And I think that also helps reduce spot prices. Now, that's the theory. I was saying earlier that the reason that I think the Biden administration has kind of fumbled the execution of this policy is that one, they weren't flexible enough in kind of paring back the pace

of the release, once it was very, very clear that prices were already down \$30 to \$40 a barrel from their highs.

The other thing is that they have well, they've actually made really good progress in changing the regulatory structure of how the SPR can purchase crude, allowing for future dated purchases at fixed price contracts. Essentially, what the Futures Curve is, but they didn't do it. Yeah, they haven't actually purchased those barrels forward. And instead, they have promised to rebuy if the spot price drops below what are the ranges I had was \$68 to \$73 WTI. Now, if I was a US oil producer, I do not blame them for not being super ready to trust the Biden administration that those repurchases will 100% take place. And even if you didn't trust them, it doesn't have that direct kind of arithmetic, kind of loosening of financial conditions, if you will, that direct purchases down the curve would. So I think that's where you've just seen kind of kind of sequential errors in the application of this policy.

Erik: I don't think that it was a sincere intention. I think that your idea makes perfect sense but I don't think Biden administration ever had any sincere intention to that. And I think the evidence of that Rory is, on the day that they said that. What was the number \$68 to \$72. If you looked only as far down the curve, as I think the end of 2024, the price was already there. They could have on the day they made that announcement, they could have bought in as many long dated futures as they wanted to at that price at their target price and locked in delivery at the end of 2024. And what I would say is, if you were going to be actually intellectually honest about this, you wouldn't even try to refill the SPR, which would take what 300 million barrels to get back up to full from here. What you would do, if you were being honest, as you say, let's go ahead and seize this opportunity at \$68 to \$72 a barrel at the end of 2024.

Let's go ahead and buy 500 million barrels, because we know between now and 2024, we're going to have some price spikes where we're going to end up releasing some more into the front month. We're going to sell more into the front one, so we better buy ahead of time, that would be the way grownups would handle this. And of course, they're doing the exact opposite. They're giving lip service to the idea of buying long dated contracts when the price gets down to \$68 to \$72 but the long dated contracts are already at \$68 to \$72 and they're not buying them. So I don't buy any of this, that I don't think they're sincere about any part of it.

Rory: I completely agree. I think that I tweeted something more or less exactly that. On that day that that price threshold was released. It's like, look, I think it was October 2024 or whatever, price was already there. I think part of the challenge here is it goes back to the reason that I think there was in flexibility in the application of the SPR release earlier this year for the balance of this year. And on one set and in one hand you can kind of say it's politics ahead of the politics ahead of the midterms to today is when we're recording, and that, you know, you're never going to have the White House do something that would be priced positive ahead of the midterms. There's rationale to that. But I honestly truly to my core believe that the larger factor that explains their inability, or at least apparent unwillingness to wind back the releases was this was already a massive change in pace for DoE for the team underpinning the release of the SPR. This is already a massive undertaking something that had never happened in the history

of the SPR in the scale. That was already such a gigantic change of pace, that I honestly just don't think the bureaucracy of the government is able to be responsive enough to the change in those conditions. Because you would have needed months of meetings in order to change the policy. And by that time well you could have actually needed it again. In this case, there's actually an argument that basically I think that the SPR really should have stopped probably in July. That would probably would have been where I would have stopped at myself. If I had you know, oils are policies.

And there's actually an argument that depending on you know, we could both be wrong and maybe you actually do get more loss of Russian supply from the December 5 threshold. There's actually an argument mix that with a China reopening, you can actually need the SPR right then. So that's I think the challenge is. You never exactly know when you're going to need it and which way you're going to need it. So I think you need to build in structurally more flexibility to the SPR governance, which unfortunately just doesn't seem like it's going to be the ending. I think the biggest weakness of the SPR is the fact that it's run by politically exposed constituencies. I think that's the, you know, versus something like the Federal Reserve, which has a history and a kind of at least an air of independence here. The SPR doesn't have that. I think an idealized policy would have a completely independent professional management of the SPR as an asset with congressionally defined targets that let's say, the way I had used about it earlier was, when backwardation hits the 95th, and above percentile through distribution, then you release full. And in any moment where you have exceptionally, exceptionally backward market like you saw at the bottom in 2020, you should be buying every single barrel you can possibly get your hands on. That unfortunately, is not the world we live in right now. But I think that would be my idealized way to realize this policy. And so I think that on some level we kind of agree and disagree on the kind of state purpose and an idealized mechanism. But I think the challenge mostly comes down to the execution of it. And that is where, at least thus far that has left me wanting more from the administration.

Erik: Final point on the SPR, because I think it's a very important one, when we talk about refilling it, I think that crude quality matters. And unfortunately, this leads us to a real political football, which is if I was in charge, I would say look, not only do we need to fill the SPR to the brim at any cost but we need to fill it with heavy blend stock. Because with all of the shale oil that is produced in the United States, if we ever got into a war situation where we really did have a national security threat. You run into this problem that the refineries in the United States cannot refine that into the middle distill, it's the diesel fuel and the jet fuel that will be most needed. You can make a fair amount of gasoline out of that light oil. But in order to make the kind of fuel that you need, which is diesel fuel and home heating oil and jet fuel and the other middle distillates. You have to blend it with heavy blend stock, which we don't really produce in the US. Now, some of it comes from Canada, but most of it comes from places like Iran and Iraq.

So, I can't imagine it being even plausibly politically correct to say, okay, we're going to refill the SPR now. And we're going to do it all with Iranian oil that's important and not with American oil. That would never sell politically. But if you refilled it with American oil, which I think is the only

politically viable way they're going to pull this off, it seems to me it creates this huge risk that now the SPR is full of the same kind of super light oil that can't be refined without blendstock. And you suddenly have this major idea, you know, much more about the physical market than I do. But it seems to me just as a trader, like a creates a major vulnerability that we would have a bunch of oil in the SPR. But it has the same non-refinable characteristics of the shale oil that we can produce. How could we get the SPR refilled with heavy blend stock without going to Iran, Iraq, and Venezuela?

Rory: I think you're right there. I don't see it being in my idealized policy, I probably I probably see much of the SPR being refilled with a type of oil that's been emptied, which has been largely been light and but some of its kind of you know, the largest portion of it was this medium sour crude. And I actually think which is kind of more or less exactly what the US average kind of an API of whether it's like 31 to 32 and a little bit of sulfur. That would be the ideal barrel. This would be kind of what you would theoretically want to blend towards as you're saying. The challenge is, it's been explained to me by people much smarter in this area than me on the petroleum reservoir side is that it probably isn't viable to fill the SPR with a Canadian crude because it would likely separate in the actual reserve wells.

But ideally you would fill it with kind of this medium sour stuff, which I was talking about earlier, but Guyana is actually producing some brand new medium sour crude that, you know, right off of the coast of where the SPR be filling so I think that's a great place to look. But I think the other thing here is that at least, you know crude markets are a global market, oil prices are global. I think you saw political... a lot of this SPR released was in fact exported it wasn't even refined in the United States. But I think that's fine. I think that the asset here for me and I was saying this earlier isn't necessarily the crude itself, but it's the capacity to be the discretionary buyer and seller. And I think that in this future market, you can still work with that, even if you did fill it up with US light tight oil, although I would agree that it certainly is not ideal and feels like a very bad kind of portfolio diversification strategy. But yeah, I would probably ideally see it refilled with kind of medium sour crude, which is kind of what's largely in there right now, kind of like what you see in the Mars field in the in the US Gulf Coast.

Erik: Is there enough production and from a political standpoint, it seems to me like it would be very hard, first of all to get the American public to understand this crude quality matters issue. I don't think the politicians understand it themselves. How could you say, well look, we're not going to get any oil from the state that you Mr. Senator are from. We're only going to get it from this one field that's producing this heavy stuff that we say we need for blend stock, which is kind of a technical issue that most people don't understand. I don't think that's politically viable. So I think that we're going to end up with refilling the SPR with super light oil that can't be refined. Am I missing anything?

Rory: No, I think you're probably right. And I think that goes back to kind of my point around like an idealized utilization of the SPR in a kind of my kind of perfect theoretical world would be far more independent of those kinds of political pressures. Unfortunately, I think you are right, and I think you will likely see some at least lip service towards refilling it with American produced

oil. But hopefully, I think as to where you could potentially get that, again, there are fields off the offshore Gulf of Mexico that do produce these, these medium sour crudes. I think that would hopefully be the best way to kind of get both, to kill both birds with this one stone here of kind of pleasing a political constituency domestically, while still to your, I think very correct point, kind of getting crude in there that is not completely sideways to what expected need would likely be.

Erik: Well Rory, I can't thank you enough for a terrific interview. We didn't even get to weaponization of oil, which I think could be coming sometime. But we're way over time. So I guess we'll have to get you back in a few weeks for another update. Before I let you go though, please tell our listeners about commoditycontext.com because you've got an incredible amount of free content there. Please tell us what your services are, what you do, what's for free, what's not for free, and what can we expect to find there?

Rory: Yeah, so commoditycontext.com is where I'm publishing all my research now. I started publishing last June so June of 2021. For the first year or so of publishing, everything was free. There's no a paywall, although even people that are still receiving on the free email list receive summary bullets and what I like to call my like my banger chart, the best chart from the from the post. I'll be releasing shortly on Guineas offshore oil production. I also have a couple different monthlies. I have a global oil monthly and a North American oil monthly. Both of which cover kind of a growing portfolio of analytics and data I've pulled together models I've cleaned, etc, that are updated and kind of presented graphically, the big chart guy. So, that comes out every month.

And then also on top of my kind of thematic pieces which are this Guyana piece or stuff I've done the SPR and these monthly kind of periodicals. I also have a weekly piece called oil context weekly, which is essentially my wrap up of what I like to think the major kind of data releases, narrative shifts, last week was a lot about COVID zero as an example. And also things that I think are near and dear to your heart Erik like term structure, the shape of curve and, you know, where your where your calendar spreads and where your crack spreads are going. So kind of a bit of wrap up that and that's just to kind of provide a bit more of a constant heartbeat of the market on top of the these deeper thematic dives they do.

Erik: Well crack spreads, weaponization of oil, and a whole bunch of other topics I'm sure we could fill another hour with but we'll have to save it for another interview. Patrick Ceresna, Nick Galarnyk, and I will be back as [MacroVoices](https://MacroVoices.com) continues right after this.