

**Erik:** Joining me now is [Boxwood CEO Morgan Downey](#), who's probably much better known as the author of Oil 101. For any listeners who are not familiar with that book I guess for most professional investors even, maybe if you're not in the oil market, you haven't heard of it. But if you are in the oil market, there's nobody who's anybody who didn't start their career reading Oil 101 by Morgan Downey, which is a book that really goes from upstream to downstream and tells the whole story of how the energy market works, from the logistics and the tankers all the way to futures trading.

It's an amazing book. There is a new version. We'll talk about that at the end of the interview. But Morgan, I wanna start with the big picture. Boy, Middle East I keep telling my listeners I think it's a really big deal, maybe more than the equity market is discounting. You're the expert.

You're literally the man who wrote the book on the market. Is this just another hiccup, a- another little Middle East skirmish, or is this a significant event in the history of the oil market?

**Morgan:** This is the significant event. The next 50, 100 years whenever the next history of oil over the next 200 years probably is written.

We are living in an event that people have modeled, traders have modeled it, risk managers have modeled it, the oil market itself has modeled it for the last 60 years, and this is it. This is the most significant event in the oil market. And over the last, s- since, probably World War II, to be honest.

Even it's greater than the 1970s crises. It's a larger, it's a larger event. And what's interesting is that a lot of things that people had presumed were going to happen when a situation like this occurs, this, the shutting of the Strait of Hormuz, have not happened. We haven't seen \$500 oil yet, yet, because we're still in the middle of the crisis.

We're at 100, just over \$100. And we also haven't seen a panic and a kind of, with equity markets are still relatively strong. So this is a crisis that everyone had worried about that potentially would happen. It's happened and is happening. But now A lot of the assumptions of how the world would react have not come to pass.

As I said, equities seem to be sailing along okay. Oil prices are a little bit higher, but not at crisis levels higher. It seems that the world's kind of taking this in stride, which is very unusual. The world taking this in stride is not what people would've predicted.

**Erik:** So why is that? Because as you say, this is, Strait of Hormuz closure has literally been the stuff of doomsday blogs. Yeah. It's what the doomers say, "Oh my God, Strait of Hormuz closed for a few weeks, you'd see thousand dollar oil," yes. Yeah it's been way longer than anybody...

And I used to get laughed out of the room for worrying about this because people thought it was a doomsday scenario that's never gonna happen. And even the people who were the biggest skeptics, Morgan, what they said is, "That can't happen because the consequences would be so dire that we couldn't, possibly let it go on for more than a few weeks."

Well- Yeah ... but it did. Nothing really that big of a deal has happened yet.

**Morgan:** Yeah. And I think a few key things have mitigated, at least in the short term, and we're s- we're over two months into this situation, but a few things have happened. One was the huge strategic petroleum reserves releases around the world.

So you had the US SPR release a whole bunch of other countries within the IEA, the International Energy Organization released SPRs. China has a big SPR, their own domestic SPR. So there was a large short-term dumping of oil, physical oil into the oil market. And oil is a very unusual commodity.

It's not unusual. It's like any commodity in that the oil industry hates to carry inventories. Carrying inventories, storing oil in tanks or in pipelines or ships or whatever, it costs money. What the oil industry loves to get it out of the ground and get it to the customer as quickly as possible.

It's never really that profitable to store oil. So the oil industry tends to try and run inventories, stored oil as lean as possible. That's always been the case for since the oil industry began 150 years ago. And that lot of oil from these strategic petroleum reserves that's a lot of oil for all of it to be released in one month into the market.

It's like someone a snake eating an antelope. It's kinda stalled- the rally in oil markets because the oil market kinda has to digest that big glut of oil from the SPR releases that were released in one glut. So that was the first thing that stalled the rally.

It stopped it immediately. It was like throwing water on a fire. It just quenched it. The challenge is that there's only so much SPR out there. There's not... this is

not an indefinite situation where you can keep dumping SPR into the market, but it did stall that initial rally.

And then in addition to that, you had some demand reduction. You're-- when you went from, we were, before the crisis, in the 60s basis WTI or even Brent crude, and now we got up to 100. Some demand did fall off. It wasn't a huge amount, but a little. Usually it's jet fuel is the first thing that reacts when oil spikes.

So jet fuel demand fell off a little bit enough that it took the edge off the rally. So you had the SPR release, you had a little bit of demand destruction. Demand destruction in oil, as I said, jet fuel's one of the first to go because it's discretionary. People just choose not to drive to their vacation or take a train rather than fly to the other side of the world.

So jet fuel, there was a little bit of demand destruction, and then you had, so you had the SPRs, you had a little bit of demand destruction. And then you had a what I think is the kind of the hidden thing that has occurred in the oil market over the past five years in particular, is that over the past five years, we had a huge increase in efficiency in inventory use across the oil industry, and it's one of the most boring things to talk about.

If you look at BP or Shell or Exxon's financials, deep in there, they'll talk about working capital usage and that they've gotten 20, 30% more efficient in terms of their working capital usage, which is basically a lot of its inventory, storage oil. They've reduced their need to store oil by 20, 30% over the last five years.

A lot of that is due to they've now got sensors, electronic sensors on pipelines and tanks, so they get real-time data on inventory levels. It used to be 10 years ago, 20 years ago, a guy sticking a stick into a big tank. It was literally that basic, even as recent as 10, 20 years ago. That's all gone now.

It's all electronic. You've got much better demand forecasting models so people can... the oil industry is a lot of really local markets. It's a big global market, but at the end of the day, there's usually this airport, this tank terminal, this gas station. It's a very local market. And so the oil industry has become much better at forecasting local, hyper local level demand.

It's almost like Amazon does delivery. The oil industry has applied that same big data technology to inventories such that the world has rounded the numbers here, 8 billion barrels of oil in storage globally in SPRs and commercial storage. 10 years ago had 8 billion.

Today, it has also 8 billion, but the world has loosened up the need for that 8 billion by about 1 billion barrels. So there's a hidden kind of extra availability of oil in the market in these inventories that has been loosened up by just technology improvements over the past five years. And if the evidence for this is you have to just look, just search for working capital of BP.

They announced their last year they had, as I said, reduced their inventory levels by 25, 30%. And so that I think has been a hidden reason for oil kind of being a little bit looser in terms of this not rallying to \$200, \$500. And then finally, another reason is there was a lot of oil in floating tankers.

Everyone points to it. There was 150, 180 million barrels of Iranian oil because Iran, remember before this, the crisis, it was sanctioned and via mostly US sanctions. But that meant that Chinese refineries and a lot of refineries around the world, they would buy the occasional cargo, but they were very reluctant to deal with Iranian oil.

So Iran had to store all this They kept producing oil and they just put it in in tankers offshore Malaysia and offshore Singapore, near Singapore, and a lot of that oil now is being drawn down. So there was a, there was a little bit of excess... not a little bit, a lot of excess supply in the market.

And so all of that together combined, the big SPR, that was like a first shot that, that really took the energy out of the rally. And the world has got probably another one or two slugs of SPR releases that could hit the market if governments decide it over the next month or so. But and then you had the inventory efficiencies, you had the floating storage that Iran and a few other countries had.

And so you had all of these kinda combined to take the edge off the rally and the oil price rally, but the underlying crisis is still there. And, one of the, one of the things when people talk about a crisis, everyone thinks about we're gonna run out of oil, like as in tanks will go to tank, empty tanks.

That doesn't happen. The world is a f- big... The oil world is a f- a big floating, people make the analogy of it's a big floating bathtub in that no one's gonna run out of oil. The world is still producing w- we, before the crisis, 105 million barrels a day. Now it's 95 million barrels per day, roughly.

And so the, but the world is still producing 95 million barrels per day. It's still a lot of oil being produced and refined. It- all that's gonna happen is that oil prices

now we're in a situation where we kinda have to go up, unless the crisis ends today, and even if it ends today, we, this may happen.

Oil prices have to go up to kill more demand destruction. And demand destruction, the oil industry started in 1859, demand has only fallen four years in all that time. So over a hu- almost 160 years, oil has only fallen, demand year on year, even throughout wars, World War I, World War II, it only fell in 1973, 1978 2009, the housing crisis, and COVID.

Four times over the last 160 years. And Prices are gonna have to rally to cause that fifth year of demand destruction in the oil industry. Oil is very inelastic. People need it to drive to and from work, to and from school. It's one of those things, it's an essential of modern life, and it doesn't matter how, "Green People" say they are you buy anything, literally a pint of milk in a, or gallon of milk in a shop that everything is transported via oil.

So it's in everything that people touch. And so- Price has to go a lot higher to kill demand. As I said, d- jet fuel is the first thing to, to the first cookie to crumble in the oil demand sequence. The next one tends to be gasoline for cars and then diesel for trucking and so on.

But it's basically, it's starting to happen, but it needs to happen much more severely. And, so we're not gonna hit a situation where tanks are empty, but we're gonna have to hit a situation where if this goes on, we are going to go to 200-plus oil if this goes on. We're currently the middle of May or towards the end of May here, 2026, and we're two months on-- more than two months into the crisis.

If this goes, this can't go on for another month when we can have a few slugs of SPR releases, but this is not sustainable without, with \$100 oil. We need oil prices... Either two things have to happen: oil prices have to go much higher, 200-plus probably, to kill demand, or the crisis ends today, and then even if the crisis ends today, there's gonna be a wind-up time of people ha- all this production in the Middle East has been shut in.

It has to be restarted. Tankers have to start going in and out through the Strait of Hormuz. So there's gonna be a recovery time and and longer term, five years plus I think the Strait of Hormuz is going to be removed as a choke point for the world oil market in, within five years.

Every Gulf producer, Saudi, UAE, all of them Iraq, they're all going to start building these pipelines, overland pipelines to avoid the Strait of Hormuz

regardless of cost, and the Strait of Hormuz is not going to be an issue in five years plus. So this is a five-year issue. Iran played their card. They choked the Strait of Hormuz like everyone worried about for years.

They've played that card. Now, all these pipelines are gonna be built. It's gonna cost \$50, \$75 billion. And put this in context can this... Is that a lot of money? Saudi Arabia on that NEOM project, that kind of desert city that they were gonna build, was gonna be \$1 trillion. So 50 to 75 billion, yes, it's a lot of money.

In the Saudi oil industry, no, it's not a lot of money. It'll add \$1 or \$2 a barrel onto the cost, and for the Saudis and others to avoid using the Strait of Hormuz within five years, they're gonna build these pipelines. So the Strait of Hormuz has got five years left as a choke point. Beyond that, it's gonna be replaced by pipelines.

It is... There-- These pipelines are already... Drawing boards are, have already been drafted to get these things built. So it's a certainty that that strait is, within five years, will no longer be a choke point.

**Erik:** Okay, so recapping what we've discussed so far, it is m- fairly easy to understand how we got to where we are today, which is we came into this crisis with a fairly significant supply surplus.

Then as we got into the crisis, there was a whole bunch of SPR releases. There's a whole bunch of floating storage. For a while, Iran was exporting a lot of its own oil. China has a huge inventory o- of SPR and commercial storage. It all makes sense, but the question that's in my mind now is that explains how we got six weeks farther into this than I thought possible at these prices.

How short is that fuse from here? Is this something where, oh we could still go on for three more months and then it's gonna really start to get bad? Or are we down to just a matter of weeks or less before this really turns into a major big deal?

**Morgan:** We're down to weeks. Yeah, it's really become that simple.

**Erik:** And is it linear? Is it... Should we expect prices to gradually start creeping higher and higher? Or is this something where one day an event happens where somebody says, "Oh my gosh, we're completely out at location X," and that's a Bloomberg headline, and people panic and, it all happens at once?

**Morgan:** I think when people say they're gonna be out, I think that the only places that will be out of storage will be those places that set the local price below the international price. So oil will be still available. As I said, there's still 95 million barrels per day produced outside of, that's available to the global market.

There was 105 before this crisis, and so 10 million barrels a day of inventory, or sorry, of daily production has to be killed. That demand has to be... And the only way to kill demand is higher prices. So we're gonna see \$100. It still doesn't... it reduces demand a little bit, but it doesn't reduce demand enough.

We're going to have to see a lot higher prices before to c- to reduce demand by 10 million barrels per day. And w- what I think is gonna happen is that you're going to have a situation where there will be some sort of negotia- not negotiation, some sort of either stalemate where we get a a kind of a ceasefire-type situation, and the strait kind of opens, but it opens, I think, slower than people anticipate because you're going to have tankers willing to transit that strait, and that's a lot of tankers every day.

It's 100-plus tankers that go through that the Strait of Hormuz. And so you've got to have a situation where- the process has to be restarted, and that restart process y- your listeners are of course very familiar with the fact that these tankers from the Middle East to China, Middle East to Japan, they take a month to, to make that journey.

So this process is like a flywheel. Once it stops, you... it takes a month or so to get back up and running, probably even longer, maybe two months. And even then, even if the tankers start moving a lot of this production is shut in, and so that production, when it's shut in, literally people have turned valves at the wellhead to stop oil coming out of these wells.

And those valves have to be turned back on. The whole process, oil is a flow type process. Everything is always in movement. These liquids are always in movement. These things have to be restarted as well. And the hope is that not much damage has been done to these, this production, these wells by shutting in production, but there's always some damage and always some unknown when that restarts.

And so that whole process, like a flywheel, is gonna take one or two months to get back up and running. So even if today, m- end of May 2026, the process starts up and running, we're into June, Jul- end of July before we've got a full even close to recovery. So This is gonna take a bit.

It's gonna take a while, and I think that what's gonna happen is that people will realize it within... people are familiar with equity markets and foreign exchange markets where you can literally print paper or print equities, issue stocks, and it's immediate. Just it's an electronic transaction.

Oil is not like that. It takes... there's a, if it's a physical process, it takes a while to get started and stop. And I think that the markets have become have think that this is like a COVID-type situation where the government will print money to get the whole process started again.

It, that doesn't help. It l- it helps certain markets, but it won't help in oil because this is engineers have to get literally on the ground, start up production. In Qatar, there's a lot of natural gas there, LNG, liquified natural gas that facilities have been damaged and might take three or four years to repair if they can even get the repairs done in that time because parts are, they, these turbines are very are being demanded by a lot of industries, including data centers.

But I think that the market has been, less panicked. No one likes to panic in any situation. The panic is never helpful. But I think this is, we're in a crisis where this market is unusually calm. And as I said, there's, and you mentioned, there's a bunch of reasons why we've haven't rallied fast, the SPR dump, the inventory overhang, all of these things have happened, but I think that they've lulled the market into this feeling of safety that is not r- reality.

We're still in this crisis, and it's a it's like someone had a heart attack, and they've made it to the hospital, the emergency room. They're still in the middle of a heart attack. It's one of those w- where we s- even to get the heart started and the blood flowing again, we still need to get that the, it, that there's still a risk in this whole situation. And I would be shocked if we're not over \$150 within a month. It, I think this is gonna take a lot longer, even if it, as I said, even if peace is declared today, it's gonna take a lot longer to restart than people think for confidence to restore in the oil market itself and for all those valves to be turned back on, and for...

and it's n- when I say turn the valves back on, it, they're not, I'm simplifying it grossly by saying that. You've gotta have a whole situation where a lot of these Saudi wells, these reservoirs are water-flooded, where there's water pumped on underneath the oil to help keep the pressures in the reservoirs c- up so the oil comes out of the ground.

And these, it's a, there's a, an engineering, very complex engineering process. It's not just turning a valve behind the scenes to produce all of this oil, and that

process has never really been shut in to this extent ever. And there's a lot of gonna be, a lot of unknowns that are gonna be f- discovered over the next two, three months, four months that could really complicate the restart.

So we're still in the middle of the crisis. That's, one thing to, to think about in terms of it... We should we need to c- create demand destruction to deal with the current crisis. But then going forward, the restart process, I have this feeling it could take a lot longer than people anticipate.

And so I... my personal view is I think we stay at \$100 plus. People think we're gonna collapse immediately following the strait reopening in two or three months' time. I think we stay at \$100 plus for a year unless there's... barring an economic, global economic recession or anything like that.

I think that th- this risk premium for... that's gonna, is gonna stay there because even if there's a p- peace declared today, there's gonna be the risk that Iran falls back and the crisis restarts in another six months' time or four months' time. So I think that the current crisis, we need higher prices immediately to kill oil demand.

secondly, the r- the restart process, I think it's gonna take a lot longer, six months to one year, maybe even longer. In some cases like the LNG in Qatar, it's gonna take four or five years because engineering facilities were damaged by drones. I think it's gonna take a l- a lot longer than people think.

And so I think that we may see \$100 plus oil, barring a recession or anything like that, \$100 plus oil for a year or two, and which is... that creates opportunities for other parts of the oil industry. The US oil industry, Permian producers are having a great time right at this moment.

**Erik:** Let's talk a little bit farther out then about how... beyond just the immediate recovery, how the global energy markets evolve afterwards, because it seems to me we've already seen some pretty strong signals. United Arab Emirates was probably half of global spare capacity before this crisis.

Pulling out of OPEC seems to me like a really clear signal that their intention is gonna be to pedal as fast as they can and just produce as much oil as they possibly can as soon as this is over. First of all, would you agree with that? And if it is, doesn't that kinda leave us in a place where, okay, then Saudi Arabia would be the only remaining spare capacity?

They're not gonna just, sit this one out and let everybody else make the profit. They're probably gonna produce as fast as they can too. So doesn't that mean that although maybe that will help bring the prices down and the supply back online, doesn't it mean that we end up with no spare capacity at the end of the day?

And then, okay we'll just make more. Wait a minute. There's been underinvestment in the energy sector due to ESG for more than a decade now. It seems to me like Maybe for the next, decade or so, we've got an investment deficit-driven energy crunch. Is

**Morgan:** that realistic?

I think it is realistic. I think you've got... The, going back to the UAE, them leaving OPEC UAE was always-- Everyone in OPEC except for-- OPEC is Saudi Arabia. It always has been Saudi Arabia. They've been the big boy on the block in terms of cutting production to maintain prices high, at a higher level than otherwise would be.

So Saudi has always been the real OPEC. All of these other countries, O- UAE and everyone else, they've been cover to make it seem like there's a global consensus. It's one of these, it sells much better when there's a group involved. Even, it's a cartel.

That's what... They're a price-setting cartel to try and keep prices high. So it's it doesn't sell well to the consumer that they're trying to keep prices high. That's why OPEC exists. So Saudi has been hiding behind all these other countries, including UAE. UAE itself, they've been they've had, their, their politically, they're, they've had issues with Saudi Arabia over the last t- for a long time.

They're a much more Western-focused entity, with Dubai, the success of Dubai in tourism and all of that. So they've been much more they're probably 10, 20 years ahead of Saudi in terms of diversify- trying to diversify their economy away from oil. And so I think that them leaving OPEC, it, it was it was always something I think that the oil market suspected that they would do. But now that they have done it yeah, they're gonna produce us flat out just like anyone else. They're gonna do they have no OPEC constraint. So it's gonna be, Saudi is gonna be the only player left with major spare capacity in OPEC.

So the dynamics of OPEC in terms of oil prices and that, I think that at a grand level, I don't think it's gonna change the long-term outlook for oil in terms of

Saudi was always the big br- big brother in OPEC. It's gonna continue to be the big brother.

Yes, UAE left, but I don't think it's as big a deal as the market kinda as it's not gonna be a big deal long term. Going to the the thing you mentioned about longer term and ESG and investment in oil and gas pre- Three months ago, we were at \$60, give or take, WTI. The marginal producer in the world was the US Permian producers, all these fracking wells in West Texas.

They were the marginal production that grew over the last 10 years. I- when I wrote Oil 101, that was published in 2009. Since 2009, what's called conventional oil production, as in you drill a hole straight down... i'm simplifying grossly here, but you drill a hole straight down and you, you hit a reservoir and the oil comes up by itself.

That production has stagnated. It's gone sideways over the last 15, 20 years. All of the growth in oil supply over the last 15 years has been from fracking, which is a US phenomenon because it's more kind of a manufacturing type process. You drill, you move the well on a pad the drilling rig 50 meters, you drill again, you frack, you drill sideways.

All of these kind of technologies have only been developed in the last 15, 20 years. So since 2009 oil production has come from this fracking and horizontal drilling as well as heavy oil out of s- out of Canada. Those have been the two major supply areas over the past 15 years. Both of those things are high cost.

They're very capital intensive. They're People make the analogy that they're akin to manufacturing because as I said, you used to drill a well, and it would be the only you would drill on a, in, within 40 acres. Now, you drill a well, you move 100 meters, you drill another well, or 50 meters, you drill another well.

So it's it's become much more capital intensive, but that, what that means is that the the marginal cost of production over time ha- is now 60, \$70 per barrel for crude oil. So as long as we stay above \$70, give or take WTI crude oil the oil industry can fund itself. Can, at \$100, the oil industry is actually a little bit, it's decently profitable.

At 70, some w- marginal producers start shutting in production. In terms of the ESG and the investment against energy growth, w- a lot of that that ESG initiatives, those initiatives were to stall oil production, stall nat gas production. Those ESG kind of initiatives have fallen out of favor and the oil industry has just moved on beyond them.

It's at \$100 oil as we are today, give or take, and the oil industry doesn't really... w- the oil industry is still very conscientious about pollution and making sure the environment is taken care of. It's not a, it's not a careless industry. But those kind of ESG where people were trying to reduce energy production, those kind of initiatives I think have stalled.

There's still a remnant of the, philosophical objections out there. You've got now a big push, you may have seen in social media all these people complaining about AI data centers, and everyone's couching it in, "Oh, they're too noisy.

Oh, they consume water." They don't consume water. They actually have closed systems, or they don't they don't... They recycle their usage. People say they're burning nat gas and other fuels. Yes, they do. Yeah, they do. That's a reality. The world's economy does need energy, and AI data cen- data centers are, 4% or 5%, or will be in the next year or two of global oil consumption or global nat gas and power consumption.

But that kind of ESG anti-energy underpinning is still there. It k- morphs into different forms. It's currently morphing into an anti-data center initiative. I think that what happens is that, people forget because people are disconnected from where their energy comes from.

Oil, nat gas and coal are still 80% of the world's energy usage. And for good or bad, for good, here we are talking on the internet on other sides of the world and listeners are listening in from all over the world. The energy from oil, nat gas, and coal enables this situation where we are living in a safe, much safer more knowledge is available type environment.

If you cut energy supply, cut nat gas, cut oil, cut coal you're trying to stall a lot of the global economy. And people can be disconnected from where basic things come from, even their food. A lot of food we've discovered from the closing of the Strait of Hormuz, fertilizer also comes from nat gas.

It is the famous nitrogen creation process, and it relies on cheap natural gas. So a lot of fertilizer a lot of plastics, a lot of the energy to move things around the world, food and tractors and everything like that comes from energy, from oil, nat gas and coal. And if you restrict those energy sources.

And if you try and go for just wind and just solar, they're good. Wind and solar, there's nothing wrong with them, and they have their place, but they don't meet

all of the flexibility and the use cases. You can't make fertilizer from solar yet. Maybe one day you... someone will discover something.

But one day, the oil and nat gas and coal they are essential to, hydrocarbons are essential to modern life. And, things like nuclear, they're also very useful and should be, I think, myself personally, I think should, they should be expanded as a part of renewables ecosystem. And but I think that the oil industry at \$100 oil, I think is going to be okay.

I think at 70 and 60, which it was a few months ago, it was not struggling, but it wasn't it wasn't thriving. So I think at \$100 oil, the world in the next few years will get enough oil out of the ground and nat gas to enable and enable growth to continue. And an interesting kind of side note is that Saudi Arabia, they their famously cost of oil production is five, \$10 a barrel, and here we are at \$100.

Unfortunately for Saudi, it's their only industry pretty much, and so they're... If you factor in all of their government welfare and costs like that, military their cost of production goes up to \$95. So Saudi is, at \$100 oil, is break even. So I think here we-- That's, it's interesting that we got to \$100 oil.

I think this is a spot where consumers can tolerate, producers can make a decent profit and g- and bring additional barrels onto the market. But in a crisis, \$100 oil is not enough. We need to get much higher quicker if this continues, if this crisis continues. I think it looks like it, even if it's resolved, this is a crisis that's gonna take a while to restart.

I think we're gonna see \$150 plus oil over the next month or two regardless of what happens, even if there's peace in today. I think that we're gonna, we need to slow down demand, oil demand a little bit by 10 million barrels per day, 10% roughly over the next few months or weeks at least.

**Erik:** I agree with you, but at the same time I'm very concerned because from a macro perspective the world could easily tolerate a spike to \$150 oil that lasts for a couple of days.

But if we're talking about months and months of \$150 oil, I think that's a, a global recession to depression kind of outlook.

**Morgan:** So- it is. Oh my gosh. The a- the analogy of that situ- or the comparison of that is the housing crisis 2008. People forget the, in the run-up to the 2008 housing crisis, one of the things that pushed the market, the macroeconomy over the edge, was we were at \$150 WTI.

We were at, from 2005 to 2008, the oil market moved Up \$100 a barrel, and just right before the crisis in the summer of 2008, we were at 150 plus per barrel oil, and that was the final straw that pushed the market over the edge. And right up to the middle of 2008, everyone knew the housing crisis was highly leveraged, even though people say, "Oh, I, they didn't know it was coming," and whatever.

It was... Everyone knew that the market was very leveraged. But the market still hummed along right up until oil got to 150, and then that was it. That money has to come from somewhere. People, only have so much spending money or disposable income, and if they have to choose between buying a, going on vacation or buying a new computer or a new phone or driving to work, they're gonna...

if it's \$150 oil, which is, \$5 plus, \$6 plus per gallon gasoline it's, they're gonna choose to drive to work because it's an essential. So unfortunate thing about \$150 oil will kill the economy. It it, there's no doubt about that. It's even if it's over for a few months, it's gonna really hurt.

**Erik:** It seems to me the critical question to ask then is if what you've said so far basically leads me to conclude that the prices only have to stay super high for long enough to cause about 15 million barrels per day of demand destruction. Okay, can the global economy tolerate 15 million barrels a day of demand destruction because, okay, we'll just carpool?

Or is that enough of a hit in... it's about 7% or 8% of global energy consumption. Can you just, cut that back and everybody carpools to work and it's okay? Or is that just a shutdown kind of event for the global economy?

**Morgan:** I think it's gonna be a shutdown type event. I don't think it's gonna shut down, but it's gonna be an event where marginal Businesses that rely on low oil prices, tourism even delivery...

everything is delivered, you buy anything on the internet these days, it comes by oil. People, they forget it's a diesel truck. Maybe the last mile is electric, but the big long-haul trucks that drive on highways, they're all diesel. Trains are diesel, train aircraft are jet fuel.

And that, getting that 10 10 million barrels per day cut in demand destruction, it's going to be very painful because as I said, it's oil is inelastic, it's an essential of daily life. It's one of the last things people cut, and so the only reason they cut consumption is because prices get too high.

And it's gonna be, I think it's gonna, it'll be a little bit painful. It's a terrible thing to say, but it's, it doesn't happen that often in the oil industry. As I said, it's only happened four times in 160 years where oil demand has fallen year on year, and those four times oil prices had to rally a lot.

In going back to 1973, oil prices went up fourfold, 400%, which, in the space of six months. So we went from back then, these are pre-inflation adjusted dollar prices, but we went up 400% within six months. That was the first kind of recent times oil crisis. And that was a, it caused demand destruction.

And the one thing I would always mention to people is that when they think about the 1970s, 'cause they're the kind of the classic oil demand destruction, 1973 and 1978. It was the OPEC and the Iran situations in ni- in the 1970s. And people also have this image, the grainy, grainy low-res images of lines at gas stations.

And the interesting thing to always note is that the only, one of the few places in the world that had lines at gas stations was the US, and the reason it had those lines is that US government in, as a reaction to the oil crisis in the 1970s, the US set the price, the domestic price of oil in the US below the international price.

And so it created a shortage because if you're a, an oil producer in Saudi Arabia, you wouldn't send your oil to the US because the price was capped. And so the lines were all artificial. They were government-created lines in the 1970s. So there's-- there will be no shortage of oil in this crisis. There will be no lines or shortage of oil if you have no price caps.

The flip side of that is that you might have \$200 per barrel oil with no lines. And so for a lot of governments will feel like they need to intervene. The problem is oil is a global market. If you put a local price cap, you're just gonna cause lines in your local country. So if Germany puts a price cap or England, UK puts a price cap, there's gonna be lines in that country alone.

Everyone else will be fine. They'll be paying \$200 per barrel, but they'll be-- they'll have supply. There's that interesting dynamic of comparing... Because this, in this situation, every oil analyst, including myself, we look at back at history and say, "What happened in the past?"

This time is different. There's a whole bunch of different dynamics are happening right now. But the, the-- a few lessons to be learned from the 1970s was, one big lesson is, if you are a government, do not cap your local price of oil. You are gonna cause a local shortage in your market. That's the one big

lesson that I would encourage if you're a government-influencing person, do not set a price cap on your local market.

It's, it backfires big time

**Erik:** I w- I would counter that with I can't remember if it was Warren Buffett or Charlie Munger who said the the biggest lesson that history teaches us is that people don't learn from history. And I don't think governments have learned their lesson or are going to learn their lesson.

I predict that they... There will be price controls, and they will cause all of the adverse consequences that you're predicting. But that doesn't mean they're not gonna do it.

**Morgan:** Yeah. There are price controls out there for certain goods. India has famously price controls, and they're already finding shortages of of oil.

Allowing the free market to operate, it feels sometimes it gives people a sense of there's no... You're losing control because the price is being set out there in the market. Sometimes it's al- it's the... not sometimes, it's almost always the best thing to do, is just let the market do its thing.

It... Prices will, yes, they will have to go higher to kill some demand, to sh- create some demand destruction. But y- at least your, if your local population wants to buy oil, it's gonna be available. It's gonna be a little bit higher price, yes. But there's no... Apart from Saudi Arabia, they really are, with their spare capacity, trying to control the price of oil, the marginal price of oil, and all these governments with their dumping of the SPR into the market in a very short period of time, they're trying to keep the price down.

So there is, quote-unquote, "manipulation of markets" going on, but there's no nefarious secret group or country or company trying to do. I think everything's pretty relatively transparent, so it's just a matter of, look at history, look what happened in the 1970s. Don't put a local price cap.

You're just gonna kill your local economy. It's basic common sense. And yeah, unfortunately, as you said, some g- some governments fail at basic common sense in history.

**Erik:** Let's come at this from another angle, because if I think about the consequences of everything that you're saying, what you're really saying here, Morgan, is It's not a question of prices might rise, prices might not rise. It's a

question of prices must rise enough to cause 10 million barrels or about 10% of global energy demand. We have to see demand destruction on the tune of approximately 10% gross of total global energy production or energy demand.

Yep. When's the last time the world went through a 10% reduction in energy demand and- Okay ... or came anywhere close to it? Yeah. And what happened economically then?

**Morgan:** So here's where, in, on trading floors and hedge funds and and basically s- research firms, they always try and back test when something like this happened before, what happened in the market then.

The challenge with that is that sometimes the situation is very different. So this is a supply side shock. There's a production has stopped oil coming to the market. The consumer still is out there doing okay. The most recent comparison was COVID, unfortunately, was 2020 when demand, because of the shutdowns and lock-ins demand collapsed by a lot, where it was, 20% at one stage over the, month to month in early 2020.

And so that was the last time oil had a a, it's... That was a consumption side shock. W- One of the very few consumption side shocks that happened to the oil market ever. And in that situation, we had the oil market became, discombobulated. I hate to use that word because it's a strange word, but we had WTI priced at negative prices because storage tanks became full.

It was like the opposite of the current situation in that we had demand collapsed because everyone stopped flying, stopped traveling. Every, the world kind of transport kinda shut down for a month or more than a few months. And oil inventories filled because the oil is like a flow. It's like a human body.

It's as I said, the oil industry doesn't like to store oil. It likes to keep everything flowing through the pipes, get it to the consumer, drill more, get it to the consumer. And so when COVID happened demand stopped. The oil industry is still pumping, and 'cause the oil industry hates to shut in wells because it causes all these down problems.

So that was the last time we had a kind of a 10% or greater than 10% fall off in demand. Demand recovered rel- very quickly in COVID even. But the prior situation was 2009 the financial crisis, 2008, 2009. That was the prior situation where... So 2020 COVID, 10% drop. 2008, 2009, 10% drop in oil demand.

And then before that it was the two 1970s shocks, the 1978 Iran, w- the Iranian revolution when the Shah, which was the he was a US style king installed there in the 1950s, but the overthrow of the Shah and the installation of the Islamic regime. And then 1973 was the the Arab oil embargo, so those four situations, COVID 2020 2008 the f- financial crisis, and then the two '70s shocks. Those, over the last 60 years, those are the four data points y- as an oil analyst or a hedge fund, you gotta try and back test and see, okay, when these things happened in the past 60 years, what happened to the rest of the economy?

In every situation equities took a huge dive immediately. So 2008, obviously the 1970s but also equities struggled in the 1970s. The only situation where equities rallied was COVID, and we all know what happened in COVID. There was the money printing and and the stimulus checks went out.

And so I think one of the big reasons behind equities being so strong into this crisis is that COVID stimulus is still fresh in people's minds. And everyone thinks that if this thing gets bad enough, as in this crisis goes on for another month, oil goes to 150, we may have another stimulus. It could be just turn on the printing presses.

It's inflationary and it comes out in the wash in the end. This money printing doesn't come out of nowhere. Everyone has to pay for it in the long term. But short term, that will have a big boost to equity prices. If you put 10, 20 grand into each family in the US or in Europe or everywhere around the world because of an oil crisis, I think that there's a little bit of thinking that equities, we're going to see a big bailout in terms of a stimulus if this gets worse and if it gets worse fast.

We may see, I think the equity markets are looking forward saying, we're going to have a COVID-style bailout if this thing gets really bad. And it's sad that the world has that kind of view now that, the printing press is going to save us or save equity markets. But it did during COVID.

And, people have got that fresh in their memory. That was only five years ago. I think that people think that if this oil crisis gets bad enough, equity markets will be bailed out by the printing press and a stimulus. That's, I think, a lot of what's in addition to the SPU dumping and all this kind of inventories in terms of a lot of the oil market itself is the sting has been taken out by shoving so much inventory into the supply chain over a period of weeks that the oil industry is struggling to manage these SPR releases.

I think that similarly, I think people are looking at equities and saying, hey, if the situation gets bad, we'll just do a COVID-style print and give everyone 10 grand and 20 grand and they can go off and buy tech stocks or- Fill up their tank once ... or fill up the tanks once buy some cryptocurrency and and make it 2020 rain again.

**Erik:** Let's go back to the two most recent major data points, which was the 2020 COVID crisis and the 2008 into 2009 great financial crisis. How long, how many months did demand destruction stay above 10% during each of those events? And how many months do you anticipate, e- even if we were to open the Strait of Hormuz next week, how many months do we have to have that 10 million barrels of demand destruction in order to balance this market?

In other words, put those two on a scale. Is this half as big as 2008? Is it just as big as 2008 in terms of how many months of more than 10% demand destruction it's going to involve?

**Morgan:** That's a very good question, and the interesting answer is it doesn't take very long at all. It takes... Oil gets to 150, and oil will move there fast.

It... People think we're gonna stay at \$100 for a long period of time. Give the market a three or four weeks from now, if we're still here in the middle of June that's, we're gonna get to 150. If we're in the same situation, strait is closed, as I said, I think that even if peace is declared today, I think this is gonna be...

the restart time is gonna force oil to get to 150 plus, even with the restart today. And so it doesn't... And then going back to comparing it to 2008 and 2000-- and 2020 oil didn't have to... On a, if you inflation adjust the price level back to today's money, oil prices only have to stay above 150 for a few months, and you get that destruction.

People stop. A lot of discretionary consumption just falls out of the market immediately. Because when you think about it, it, people start canceling vacations. They don't book long trips. They stay local. They will cut back on other things. People will still buy oil, but they will buy less of it, and they'll be more conscious of, consumption that, that involves oil s- spending.

And so it doesn't take that long. I think in 20-- in 2008, I think we only stayed above \$150 for a few months. I think it was, it literally was two or three months. And in 2020 oil demand fell below 10%, and again, it was only a few months. And that-- 2020's a complicated one because there were so many...

It was in a very unusual situation with the stimulus checks and the whole f- obviously the situation. 2008 is the better comparison, and it only took about two months of \$150-plus oil for-- in the middle of 2008, for consumption to fall and stall. And then obviously we had a- an equity crisis immediately around, after that.

So it basically this happens fast. And so I would encourage your listeners to, to be prepared for, if you're one of those things, even oil, oil companies fa- are famous for the fact of, they do stress testing of their portfolios. Banks do that now since the financial crisis also.

And but they basically I would-- if you have-- y- you should be stress testing your portfolio, not just in a negative way, in a positive way, because some things will actually become very cheap when you have \$150-plus oil. I would be stress testing your portfolio for 150 to \$200 oil happening over the next month.

What will you do when that happens? Because that is a more than 50% chance of probability of happening over the next two months, 150 to \$200 oil. The economy's gonna take a moment, as in it's gonna react negatively, the macroeconomy, and it's gonna look bad. It's gonna look-- People will be starting to say really bad things about the economy.

We're in a doom-type situation. Equities might do okay in this because as I said the people are gonna think we're gonna money print our way out of it. It doesn't help the oil industry, unfortunately, the money printing, but it might he- help equity valuations and multiples might expand because of that.

But I would s- if-- as of today, the end of May 2006, I would be stress testing my portfolio for 150 to \$200 oil within the next 30 days. And what will you do when that happens? Some things, airlines, a lot of the US airlines are not hedged. Some of the European airlines are hedged. A lot of them actually are Ryanair and Lufthansa and a lot of these guys.

But so you're gonna see a lot of these instru- interesting dynamics are gonna start to appear. Oil and gas producers in the US are gonna be-- are gonna have a really good summer. No one-- They're, they're normal people like you and I. They're not gloating over higher oil prices.

They would like prices to be \$100 or \$4 per MBtu for nat gas. People would like those prices to be their producers. Those producers are gonna look could be

looking cheap today versus if we get to 150 to \$200 oil 150, \$200 oil is not sustainable f- over a longer period of time, at least today.

And but I would be stress testing my portfolio today in anticipation of this happening over the next 30 days.

**Erik:** On that uplifting note, we're gonna have to call time on this interview. I can't thank you enough, Morgan, for a terrific interview. But before I let you go, there's another piece of news in the oil market, maybe not quite as big as the Hormuz crisis, but close, and that is a new edition of Oil 101, the book that almost all of us read in the beginning back when it came out in 2009.

Why now, almost 20 years later? I don't think this was brought on by this crisis. You were writing the new book before the crisis hit. So why the new edition? What's new in it? And for those listeners who haven't read Oil 101, tell us a little bit about just the structure of the book and what it's about 'cause it's definitely the bible that everyone goes by.

**Morgan:** Prior to the first edition of Oil 101, I was an oil trader. I traded, I still do futures physical oil swaps, OTC swaps. So but I was-- I had to assemble all of my knowledge and as did everyone in the industry, from dribs and drabs. There was no single source where you could say, "Okay, I want to learn about shipping oil and pipelines as well as refining, as well as a bit of history and context," like a bigger picture, zoom up a little bit.

But still not in a dumbed down way, in a relatively, information intense way. And so I wrote the book I wish someone else had written. I had to-- I kinda had to write the book. I felt obliged to do it. And that was in 2009. And the oil industry in 2009, and so we're now obviously in 2026, 2009, fracking and hydraulic fracking as well as-- so back in the big recovery in US oil production as well as a whole bunch of other kind of developments like electric cars hadn't- - didn't really exist.

It sounds like a long time ago now, 15 years. And I wrote the first edition in 2009. It became-- it was- People bought paper books back then. People don't do that now . But p- it became a really-- it became a global bestseller. It was... Basically, you get a new trader on a desk, or you're starting a job in an oil refinery or an, a nat gas producer in the US, you get handed this book.

And it stood the test of time. It's-- A lot of it was, has been evergreen. But a few things did really need to be addressed in the second edition. One was the huge

growth in US oil production. So That in itself was an interesting tale of how did that happen?

And it is actually a very interesting story. The whole backstory of how US oil recovery that had been a long-term oil production, had been long-term decline, how that turned around, and the US is now the largest oil producer in the world. And is a net exporter. That was 15 years ago, that was not the case.

It was not looking good. And a lot of this was turned around by technology. The oil industry is highly innovative. People think of NVIDIA and tech companies like that when they think of technology. The oil industry is a extremely technology-intensive industry, and which is the reason why the US has become one of the largest oil producers, if not the largest oil producer depending on the month at the moment.

And so that was one reason, just to cover the changing supply, including especially the US oil production growth. And the second thing was I wanted to make it fully electronic. So it's now, it's on... If you go to [morgandowney.com](http://morgandowney.com) it's there on the on the internet.

It's much more interactive. The charts... it's no longer just a book because things change so quickly, obviously, these days that it needed to be delivered in a different format. So the second edition which is produced tw- 2026 it has much more interaction.

Everything is interactive about it, as well as it enables me I have a chapter on the Strait of Hormuz crisis, and And I update it every day or two. It's allows me to talk about, how much inventory is in SPU or how much is being drawn down. So it's basically a modern delivery mechanism for the same book.

So you can still buy the physical book off Amazon and things like that. And it's still worth getting because it's, some people like the tactile nature of being able to flip to the index and look for a particular obscure word, like what does API mean or some acronym. And so physical book is still useful, but the...

You can just go to [morgandowney.com](http://morgandowney.com) and... Or just look up Oil 101, just Google it, and you'll find the book. And it's just a modern version. It just needed, to be more interactive, which is great. It enables the book to keep up with current, evolving situations like this the Hormuz crisis.

**Erik:** Okay, Morgan, and just briefly, tell me what is Boxwood? You're now a software guy.

**Morgan:** Yeah. So as mentioned, the oil industry is a very technology-focused industry, and Boxwood is a piece of software that oil and gas producers, so the people that get oil and gas out of the ground, primarily in the US they use it to manage their hedging.

So if you're a nat gas producer and you need to lock in \$4 per MMBtu gas, you can use this software called Boxwood to help you get that overview and as well as detailed level analysis. So it's air traffic control for financial markets for oil and gas companies. So it allows them to make really fast-moving decisions and very smart decisions using the Boxwood software.

So it's like a tool used by the CFO, the CEO, the treasurer of oil and gas companies primarily in the US, but all around the world, and it's called Boxwood, B-O-X-W-O-O-D.

**Erik:** And again, listeners, the book is Oil 101. Your research roundup email contains a link where you can find both the Amazon link as well as a link to Morgan's website, which is [morgandowney.com](http://morgandowney.com).

Patrick Ceresna and I will be back as Macro Voices continues right here at [macrovoices.com](http://macrovoices.com)