

## Philip Verleger:

## Central Bank Policy Trumps Energy In Economics March 31st, 2022

*Erik:* Joining me now is energy economist Phil Verleger, founder of <u>PKVerleger LLC</u>. Phil, it's great to get you back on the show. It's been way too long. Let's just start with the big picture of the energy market here. It seems to me like, boy, we've got so many factors. A confluence of factors coming together that really looked like higher oil prices could be on the horizon. How do you see this? What's the big picture? What lays ahead?

*Philip:* Well, it's complicated like you say, start with a macro economy. Inflation is running 7% in the United States. Well above the 2% target for the European Central Bank. And so central bankers are going to tighten monetary policy. And they're, I think we're headed probably for a recession. It's not clear how severe but they want to bring inflation down. Oil is contributing to this. Metals are contributing to this. Food prices are contributing to this particularly with the war in Ukraine. So what I see is probably a drop in oil consumption. And that may help bring the market back into balance. We are short right now some crude oil, although oil exporting countries could boost production. We're also more importantly, we're short diesel fuel. Diesel is a big problem. Now, we were talking about diesel three years ago in the run up to the IMO standards to take sulfur out of marine diesel. At that time, I was warning of \$200 oil. And most people didn't agree with me. I was warning because we have a problem making low sulfur fuel. Low sulfur crude is great to make it. High sulfur crude works only if you have the proper refining capacity. And that right now is being used to the maximum extent possible.

So what this means is diesel prices are up. The margins are I saw someplace that there's something like \$60 a barrel and truck drivers are paying higher and higher prices. That's going to pull up crude prices, that's going to add to inflation, that's going to make it harder for central banks to ease off so to bring the diesel market back into balance, you may take a more severe recession. Problem could get solved if the government, US government and the other governments decided to release the light sweet crude oil from strategic reserves. Light sweet crude oil produces a lot of diesel and it can produce it at almost any refinery. But government officials seem to be really stubborn about using it. We've used 5% of the strategic stocks in this episode. And I guess they're not going to do much. And you know, it's idiotic but that's where we are. So we're probably going to see higher oil prices, a significant recession. And all those in central bankers generally don't know the names of oil ministers. The oil ministers are going to

discover on exporting countries you're going to discover in two or three years that oh, demand is way down because of the recession. And it may be down permanently.

*Erik:* Now I'm seeing a lot of analysts make an assumption, which is they say, look, there's a lot of signs that there's a recession coming. Surely that has to mean lower energy prices. So let's kind of prepare for that. It seems to me like there's a scenario they may not considering which is the one where the cause of the recession is high energy prices. That's happened before. I think you could make an argument in 2008 that high energy prices may have been a contributor to the whole credit crisis. Now, does it make sense to think that there is a scenario where we have a full on recession where energy prices stay high the whole time or does it kind of work the other way, where once the recession is on, it's got to bring prices down? Because it seems to me like there's really not a whole lot of spare capacity. And I wonder if we're nearing a point where recession or no recession, we just get into a grind higher in price.

*Philip:* Well, we could get into a grind higher in prices. I'm not quite as convinced as other people are because we're seeing some significant drops in consumption like California. But let me go back to that. Your presumption on 2008. The good economic research on this. Brookings published a couple of papers on this suggests that the recession of 2008 kind of started with oil prices, consumers backing away from SUVs. But Alan Blinder, who was the vice chairman of the Fed and teaches at Princeton, and others have concluded that energy really was not a big deal in 2008. It was due to subprime lending and the collapse of subprime lending. And if you go back, Ben Bernanke wrote a great paper all in the late 90s. I think the late 90s looking at the first energy crisis, and I was a young economist. And basically, you came back it was monetary policy. You know, energy is important to the economy but not that important. And almost all the good macro economic research now says that, you know, energy doesn't by itself bring on a recession.

This time, it's not going to be different from an energy point of view. This time will be different because there's a huge problem with wheat from Ukraine and Russia. So we may have very high foodstuff prices, the oil prices are high, so we're going to have higher interest rates. But higher interest rates are going to make it extremely difficult for emerging market economies. Those who have invested in emerging market economies and we could easily see some big debt problems. But having followed energy for 50 years and been an energy economists most of that time. Yeah, I've kind of learned to respect the views of the macro economists and the particularly the monetary economists that energy is while is, I guess, I would say interesting to the monetary people. It's not that important.

*Erik:* Let's talk about the transition, which is beginning now it seems to me, we're in a really pivotal moment in history here. For the last 150 years, the entire world's energy source has primarily been rock oil. And that's just the way the world works. And we've pretty much committed seems like the government commitment is there that we're going to get off of fuels and electrify the economy. And I'm all for it, except for one thing. Feels to me like the ESG movement is really pushing to phase out a lot of new investment in energy exploration and production before we phase in the replacement. Am I right to be concerned that perhaps

policymakers are not completely in touch with what this transition is going to take? And particularly what are the opportunities for investors to maybe notice where markets are mispricing things because people are not completely in touch with what it's going to take?

**Philip:** That's a very good and very complicated question. There's several parts to it. First, it is clear that the environmentalists are limiting access in some countries to oil and gas resources. The Biden budget which was released yesterday shows they don't expect to offer any offshore properties for lease. Now, the courts have ruled that they have to but other courts have ruled that they can't do a global can't consider global warming and there's a conflict and it's gonna have probably have to go to the Supreme Court to set some rules clearly. And you know, it could be that we don't have any leases of offshore property until 2024, maybe 2025. So that's one part of the thing. But the other part of the thing is that you keep hearing these statements, you heard it at Sera, you hear heard it at the world oil conference, world oil conference and in Houston in December. The people from the oil industry say look we need more investment from the financial community.

The big thing is that the investors don't seem to want to invest in oil. And now this is a question not of government policy. This is a question of where people with money see the future returns. And investors seem to have to concluded that fossil fuels don't offer them much or don't offer them the same prospects say that Tesla does. That Amazon and other industries or maybe even these smaller modular nuclear power plants. There's plenty of money out there that's available for investment. The investors are turning their back on the fossil fuel industry. Why? Well, maybe, you know, they just don't see the future returns there. Maybe the industry just hasn't offered them the future returns the returns of the past. One of the things that's pretty clear to me is that investors aren't really hot on oil, hot on gas, or hot on coal. And so, you know, there is an opportunity for the investors listening to this podcast because that means that probably there's going to be a limited supply of fossil fuels and that fossil fuel prices will probably stay high for a while until the economy slows and or the transition gets going. But, you know, it's a question of where people who have control of their own money want to put it.

*Erik:* Phil, let's talk more about how we get through this transition and what the challenges are going to be, I hear critics and skeptics talking about things like, look, there's not enough electrical grid delivery capacity to charge the whole nation full of electric vehicles. No country in the world has that. So there's an assumption when you're going to roll out electric vehicles that everybody's gonna buy one and just charge it up at home when in reality that entire country's electric grid has to be re-engineered in order for everybody to be able to do that. Then I hear other people tell me who claimed to be expert at this tell me no, no that's all just nonsense. It's a bunch of rhetoric. It's not true. Well okay who's got the hard data? What's the real story here? Do we have a problem that we can't really electrify the economy because the grid is not up to it or is that exaggerated?

**Philip:** The answer again, it's an extremely complicated question. And you're asking the right question. I think. Now, I'm certainly not an expert on the electricity grid. But it's absolutely clear that you could not electrify the entire economy right now with a grid we have, that just can't

happen. And if you are thinking about electrifying economy with Central station power stations as we have in the past. It's going to take a lot of work to build a larger grid. The question becomes one of is that the way we're going to go? I mean, I remember 30 years ago or so talking to World Bank economists about the potential shortage of copper because it was going to take this a huge amount of copper to wire up all telephones to everybody in Africa. And you know, it was you're gonna have to string the wires, the poles, and everything else. Well, that didn't happen. And they all have phones now and it's called cellular phones.

So the question is, do we do what Amory Levin says which is really moved to a much more diversified and localized generating system with a lot of local solar on your house, on buildings and so on. Batteries and other facilities. And this is a technological issue. And it comes back, you know, Vaclav Smil has written a number of books about transitions and saying well once you build the capital goods, you use it until they expire. His books are very good but that's not true. I mean you set the France laid the keel for the SS France about the time the first 707 started taking passengers from New York to London. That SS France was a failure as a transatlantic passenger ship because people didn't use the ships anymore. So it became the Normandie or cruise the Caribbean for a while. It was scrapped well before its life was over. And so I think I understand and I think everybody's right. We can't electrify the economy with a current grid. But we can electrify the economy if things change and we move say to using the equivalent of cellular phones and local generation.

Erik: Cellular phones...?

**Philip:** Well you know, if you sit back and think about it extend the cellular phone concept. Most people don't have landlines anymore. More and more, my friends are saying we've abandoned our landlines. It hasn't happened in my house. But we have a landline, we have an elevator in the house and the city requires us to have a landline in case the elevator fails so but you look at the drop in landline connections that get put out you know, they've gone away. So if enough people go to using solar and the cost of solar generation keeps coming down. And if the electricity regulators let that happen. Maybe I think we probably do it, but we just do it with a very different kind of electricity generating system.

*Erik:* What are the other major challenges that you see ahead as we go through this energy transition and particularly what are people in the industry perhaps missing or not seeing on the horizon?

**Philip:** Well... hahaha, let's go back to the question of diesel fuel. In 2008, the Europe pushed ahead with low sulfur diesel when the world's refiners weren't ready to produce. And so the price of diesel fuel went way up relative to crude refining margins. And that led to the \$130 crude. Same thing is happening now. It's happening in part because the shipping industry reduced the sulfur content required for fuel back in 2019. And as I said earlier on the show. In 2019, I was saying you know this could create a problem. What's creating a problem today? So there's a shortage of low sulfur products. The first you know, the biggest problem really is and has been for a long time. The failure of environmental regulators pushing things like Low sulfur

fuel for ships, and the oil industry and everybody else to talk in a civilized way and plan ahead. They didn't plan in 2008, they didn't plan with the IMO. And we're seeing the problem right now with a shortage of diesel fuel and a shortage of low sulfur shipping fuel.

So, you know, the big issues are really kind of this ability to talk We have a significant problem with helping emerging market economies move off of fossil fuels. And so you hear read statements came out of this Atlantic Council in Dubai that you know, the poorer countries need fossil fuel energy for a long time. And the major developed countries need to give them the money to do this. I don't think the major developing countries are going to give them the money to do this. I think that the Europeans are going to impose rules which essentially penalized financially countries that haven't adjusted quickly and gotten off of fossil fuels. And so, you know, we could be heading towards a serious issue where there's a lot of starvation and a lot of harm going on, particularly outside the developed nations. And if that happens, and you're going to get a lot of people from Africa trying to go to Europe, from South America trying to come into the United States and migration is going to be a much bigger issue. So it's really, you know, macro. I mean the title of your program is macro voices and it's a serious macro issue of how to coordinate this. And it's not just within the energy sector, it's between the energy sector and policy planners and really development officials around the world.

*Erik:* Phil how able is the energy industry to really do what you just described in this current environment where nobody's really sure whether Russia is friend or foe as far as we know, they still selling us energy or are they allowed to sell us energy. You know, it kind of changes day to day. What are the consequences of the present geopolitical challenge event to this transition in the ability of planners to anticipate because it seems to me how things go with Ukraine could play a pretty darn big role in what the price of oil looks like in the next six months.

**Philip:** Oh, how things going in Ukraine is gonna play a big role with the price of oil for the next five years. I guess, you know, as you're asking the question, the thing that flashed across my mind was oil is the new tobacco industry.

*Erik:* In the sense that it's going to be targeted as you know, they're the bad guys, we need to shut them down or in some other way.

**Philip:** No but not quite in that sense. In the in the sense that nobody's listening to them. You know, I send an email to I write in for a number of organizations, I write for EIG. And I send a note to my editor there. You know, right now, I think I'm living on Venus and the oil industries on Mars. You know, they're talking about the oil producing countries say we know how to manage the oil market. And the younger guys, they've never heard of Paul Volcker. And as I said, the central bankers never really pay much attention to the oil people. There needs to be a much more constructive dialogue between oil producing countries, the oil sector, economic planners, and the central bankers around the world.

Let me give you one example of for the last month or so commodity companies such as Veto and so on have been talking about the credit squeeze they face because the high prices. You

know, the price of natural gas went up. The margins that they're required to put up are so high that, you know, even a firm like Trafigura, where people take home multimillion dollar salaries is looking at bankruptcy or to continue operating the way they want. They want to operate, they need an injection of a small sum of \$3 billion. Little money. There is just right now no communication. The oil industry doesn't make things any easier by saying look, you're going to be paying \$150 or \$200 a barrel. A central bankers say, well we're going to keep inflation to 2% which means I guess growth can be slower and we're not going to need the oil. Somehow a dialogue has to be struck. And the oil industry, the people in the fossil fuel industry have been systematically bad at reaching out because rather than saying well price is gonna go way up. They need to say, look, we need to find a way to keep prices at a level where we can keep inflation under control. That isn't happening. It's not happening out of the Middle East. It's not happening out of most private companies. The US companies like Pioneer and so on said well we're not going to expand production because we don't want to offend OPEC. Well, what the firms like Scott Sheffield, who's CEO of Pioneer have done is offended central bankers indirectly. And central bankers are not going to be very flexible in terms of letting inflation go up a little because inflation is far more important to them. They don't want to get embedded in the economic thinking then a recession which perhaps pushes oil back down to \$40 a barrel.

*Erik:* Now, there are a lot of people that are beginning to talk about price controls. I personally have a pretty strong bias that that's never the right way to solve a problem. But a lot of people think it is. Are price controls potentially a good idea and regardless of whether they're a good idea, are they likely coming or not?

*Philip:* Oh, God. Oh, God. So when I had color in my hair. It is very gray now. I went to work in the Ford administration at the Council of Economic Advisers. And the focus and the reason I went there was to get us out of price controls. I stayed at the US Treasury in the Carter administration because I got asked by the Secretary of Treasury to help get rid of crude oil price controls and I managed to help lead the effort to get us out of price controls. The Energy Department's didn't. And as for getting us out of it, I was rewarded by being asked to draft and think of a windfall profit tax. These are not good ideas. Matter of fact, they're terribly bad ideas. The distortions they caused if you go back and look at the World War Two experience and and I got into this business because my grandfather's good friend had been a senior official in the Roosevelt administration had in fact run the price control programs for well had been ahead of the descent of St. Louis Federal Reserve.

And he, you know, told me all when I was in high school, all the problems with price controls. I cannot I can't screen but I don't, you don't want them. Now, so that is a terrible idea. There are some controls that might help. One of the things and there's the report I sent you. I sent for *Notes at the Margin*. I've been following very closely how hedging of call options on crude and on crude oil has exacerbated the volatility of oil prices. One of the steps that one could take is to require people who write calls on these say \$300 call on oil be fully covered. That is if a firm writes a calls on 100 contracts, it must be long 100 contracts under all our modern derivatives models. If I write a call today on \$300 oil for 100 contracts, I only have to have about a third of a contract. 1/3 of a contract I need to cover that to hedge it. And if price goes up, I have to buy

more. S, and Javier Blas wrote a great piece for Bloomberg in January 18 saying Wall Street was about to take the oil market on a wild ride. And it has because as I do the numbers, the number of calls out there are so large that every time somebody says well, oil prices might maybe should go up about 50 cents or something like that, it gets magnified to \$5. So you don't want price controls. The financial markets are out of control. And as Blas said, people are buying lottery tickets on oil. It's you know, it's the odds are better buying call options on oil right now or call options on natural gas in Europe than they are on betting on a sporting event. You know, you just look at the handle in the sporting events and how much it goes back to the better versus what oil is and oils earning much better returns. That needs to change. That could change. But you don't want to tax and you don't want just sudden taxes on oil and you don't want price controls.

*Erik:* I couldn't possibly agree more Phil that we don't want price controls. But the very fact that it's such a bad idea almost tells my cynical mind that it's more likely to happen if government's in charge. You've been through this once before in the 1970s event for some of us that are a little bit younger than you are. Tell us a little bit more about maybe what people have forgotten about price controls. How that went and why it's such a bad idea but also for fatalists like me who think it's probably coming even though it's a bad idea. What do we need to be thinking about as investors in terms of getting ready for it?

*Philip:* We agree 100%. You know, it's an economic policy. If there's a really great idea, it's almost impossible to get it through and if it's a bad idea, it almost always happens. That seems to be Murphy's Law or move Murphy's corollary. The problem with price controls essentially is that... Let me rephrase that the problem with price controls are... this is plural. The Myraid, of details that you have to get into to make them work. When we went into this in 1971 50 years ago. 50 years ago plus six months, they froze them for 90 days. For 90 days okay you can just freeze prices and most things will be fine. But if you go much further, then you start to say well we have a problem here. We've lost some capacity here or something else and we start having to make adjustments. And it means you have to start building a bureaucracy. And we built a bureaucracy called the Cost of Living Council in the 70s. And they were looking into everything, and everybody had to file all this information. And then you had to, you know, if you had a problem, then you can apply to get a special exemption. We had special courts, temporary court, emergency Court of Appeals which was not very temporary. You know, it's a rabbit hole once you go down it. There's so many details that you have to start looking at, that's a problem.

So, you know, if you want to see what it happens, it is just look at what happened to trade when the previous President started imposing trade sanctions on China and you know, people then steel companies had a problem because they imposed on one kind of steel. So a lot of US manufacturers who bought the steel and then fabricated and so on, we're faced with going out of business. The world economy is far too complex to allow something like this to go, the details are just awful. So it's terrible. Now, for an investor. You know, there were a lot of people who made huge sums of money out of this because there are always little niches where somebody who who's bringing his costs down, it can suddenly start making huge sums of money because other competitors are facing constraints. And what one has to do is start looking for where are

the big productivity gains? What are the big businesses and go there. My guess is, you know, so it's technologically advanced businesses that will move ahead and be very successful. It may well be that with the electric vehicle manufacturers wind up doing really well with something like this. Because if their costs come down as I think they probably will, but you really have to start moseying around because nobody tells you, you know, the analysts rarely pick this up because nobody really talks about the big advantages.

*Erik:* You talked earlier about how energy affects the economy, but it's not as big of an effect as central bank policy. And I agree very strongly but at the same time, it seems to me that the macro economic phenomenon of inflation is very definitely a major major factor in the economy. And there's at least some people who hold the opinion that the cost of energy is the primary driver or one of the primary drivers of inflation. So just to clarify what you said before. To what extent do you think that the price of energy is the actual cause of the inflation that we're seeing? And to the extent that that is involved doesn't that really give oil a bigger role in the economy than we discussed earlier?

**Philip:** Well okay so first, if you go back to what central bankers think. And there's a woman Schnabel who's the German member of the EC, the European Central Bank. A voting member who spoke at the American Finance Conference in January and her point, and she was talking and she's an inflation Hawk and she was saying look, we don't need to worry about rising energy prices if they don't get embedded in inflation expectations. What central bankers look at today, and they did not look at in 73 is inflation expectations. If consumers don't expect the inflation to last, central bankers will be much more relaxed on it, if it starts getting embedded. Now the question is, is energy really important to consumers? Well, The price of gasoline gets everybody's attention. But in fact, the share of the amount consumers have been spending on gasoline has been declining dramatically over the last 50 years. So that right now, it's not a huge number, it's 2% or so. So increase in the price of gasoline costs are a burden on some consumers but not in aggregate. And so that is not such a huge deal here. And the price of natural gas has gone up here, but not by the amounts it has gone up in Europe.

So the answer is, it doesn't look right now like oil and gasoline prices are really affecting consumer expectations on inflation. What is in fact affecting consumer expectation inflation are cost of clothes, cost the shoes... Well there it's the cost of what's going on the logistical issues, the fact that we're just not getting the stuff from China quickly enough. The cost of food. Now, certain extent fuel works into the cost of food. But the price of food is also determined by the size of harvest and so on. You work it back and I'm guilty of this because I used to say well energy was really important to the economy. And the fact is, there are a whole lot of factors. And if I were a central banker, I would not be paying much attention to energy, I'd be paying attention to wages to you know, the fact that 2 or 3 million people haven't come back into the labor force and so wages are going up. And you know, the biggest issue for central bankers really is prolonged increase in wages or wage increases that are not matched by productivity increases are really detrimental to the economy. Far more detrimental than energy. So that's really why central bankers have been so relaxed about the rising oil prices.

*Erik:* Now, there's another theory that I've had that concerns me anyway which is it seems to me like nobody really knows what OPEC plus spare capacity is. Of course they tell us numbers but I'm skeptical of their accuracy. And it seems to me like basically everything is fine until OPEC runs out of spare capacity. And at that point, we don't have a backup plan. And I can't tell how close the clock is to midnight so to speak because I don't know how much spare capacity OPEC+ really has. And I'm convinced that the individual countries in OPEC+ probably are playing poker with each other. So most of them don't know how much the other guys have. So I'm not sure there's anybody who really knows the total spare capacity of OPEC+. Am I right to be concerned about these things or am I barking up the wrong tree?

*Philip:* It's an important issue. I think that the UAE and Saudi Arabia have had between them probably 3 million and 3.5 million barrels a day of surplus capacity. That's about where it is. And there may be a little more in Kuwait. Now, I don't lose any sleep over this. Because I think that, you know, probably more capacity will come on from these countries. But it's, you know, they're not going to use it. The stubbornness there, I actually... when I read the statements from the oil exporting countries saying, you know, we're in charge of the oil markets, we understand it. Well, they don't. And then they say, but you really have to provide us protection against these missiles that are being sent out from Yemen. Well quite frankly, I think we ought to pull all the people out of Saudi Arabia and just let the Saudis defend themselves if they're not going to be a little more cooperative on oil and the same thing for the UAE. But coming back, you know, I've seen these studies for a long time relating between oil prices and capacity. And I quite frankly don't believe them. I figure there's more capacity there if the countries wanted to use it. They don't... they have they have market power right now and they're choosing trying to squeeze us.

*Erik:* Now another thing that's gotten a lot of people's attention, and I know that you wrote about it recently in the latest notes on the margin which is your fantastic report that you publish. That is the question of prompt time spreads on both Brent and WTI. Obviously, the tension in Russia is part of this but you know really the amount of the premium that's being put on the prompt month, prompt delivery month, anybody who's got spare oil could be delivering into the market and although on the day that we're speaking, we're down a bit on some peace talk news. We were north of \$3 a month on roll premium. So anybody who had any oil could sell it into the market and buy it back a month later for a guaranteed \$3 return and they're not doing it. So it just really says there's no oil in the market. I get that there's big risk in Russia. But why are these spreads so wide?

**Philip:** There's one word that describes it. Hoarding. And we've seen it many times. We've just seen it with COVID, toilet Paper, paper towels. People rush out to buy because they're worried about supplies. Go back to December 1973, Johnny Carson who had the best late night television show at the time and well known came out one night and said, this is when people were lining up for gasoline, he said, there's another shortage coming and it is for toilet paper. And there wasn't, there's plenty of toilet paper around. But the next day, the shelves were cleaned and there was a toilet paper shortage. This is an issue that goes back to the beginning of time. When people start worrying about future supplies, they become less willing to sell them whereas buyers become more aggressive at trying to buy them. And so you build up a hoarding

premium. And I think the hoarding premium as of last Friday was something on the order of \$16 a barrel for Brent crude maybe \$18. The hoarding premium for heating for diesel fuels about \$40 a barrel, \$1 a gallon.

This is natural, if we see it in every commodity and it is everything. And it's just has to do with the uncertainty on supplies. If inventories were higher, it would be lower. But I mean we saw the same thing when Iraq invaded Kuwait on August 1st, 1990. There's no problem. And then on August 2nd, the invasion came and the prop premium went way up. The spreads went way up. And all the oil experts and people in the government said we don't understand this plenty of oil around there's no reason to use strategic reserves. And we're hearing the same thing today. And my real frustration is that the energy policy people are so dumb when it comes to economics. This has been here, we've observed it. And we're sitting on 1.6 billion barrels of strategic stocks or 1.5 billion around the world. And all they've used is 5%. I mean I don't know what they're holding it for. I mean this is the real big shock. Were there to be a huge release, prices would be down. The price of gasoline be down 75 cents a gallon. I mean, it's psychological. And it's been here forever.

*Erik:* Phil as we close, we've already talked about some of the problems. Let's talk about what the world should be doing and could be doing. What should we be doing in order to mitigate or deal with these energy price challenges that the world faces right now?

Philip: Well, we should step forward and embrace what the United States and Europe did last weekend where the United States is pushing to supply more natural gas to Europe to help fill a real gap that they have. In other areas, today is a time for humility on the part of oil producers, consumers, across the globe, natural gas producers and consumers. We really need an understanding on the part of oil producers in the Middle East that this is an economic crisis and that more production is needed to kind of soften the blow on price levels. We need humility on the part of oil consumers that they're going to have to pay higher prices. Governments across the globe where the consumers are affected by higher prices should not be cutting prices, cutting taxes on consumers. Because that does send some wrong signal. We have to reduce demand. On the other hand, governments should take steps to make consumers hold. This means giving them checks. One of the best ideas I've seen it's been criticized is in California, where the state's gonna provide credit cards for \$400 to everybody who owns a vehicle. Well, they should provide it to everybody. Give them money, don't cut the price, give them money so that the impact of a higher prices on the consumer budgets are mitigated and the consumer has a choice to spend the money someplace else. That keeps economic activity going. That tends to move the economy off energy and adjust to the higher prices. What we need is policies that somehow stabilize growth while cutting the use of oil, cutting the use of natural gas in these terribly difficult circumstances.

*Erik:* Phil, I can't thank you enough for a terrific interview. But before I let you go I want to talk a little bit about Notes on the Margin. That is a report. And I'm not going to call it a newsletter because newsletters don't have the amount of footnotes that you have in this excellent report. For people who are not familiar with it, we do have a sample copy. The March 28 issue is linked

in your research roundup email. If you don't have a research roundup email, go to our homepage at <a href="macrovoices.com">macrovoices.com</a>. Click the red button that says looking for the downloads. Phil, tell them what they can expect to find both in that issue and in future issues of <a href="Motes at the Margin">Motes at the Margin</a>.

*Philip:* Well what notes of the margin is and there's a companion publication occasionally. I just essentially, what I call hard ass economics. I look at the oil markets. I've been looking at them for 35 years basically as commodity markets, and, you know, trying to find the important economic issues of the time. In this recent issue, one of the things I looked at was the decline in gasoline use in California where there's been a massive penetration of electric vehicles as compared to Texas where there isn't. And what you find is that California consumption is down 18%. It's really an economic exercise. I am trying to work on a book that looks at the difference between 1973 and what's going to happen going forward based on all the changes that have happened in the economy. And it's an economic report, it is not an analysis of companies and it's not really an effort to project forward. Although, I do project forward based on some financial indicators once in a while but it's an economic exercise. It's as somebody said, it's almost a hobby at this point. But it's you know, it's trying to bring some economic understanding to an area where there is a precious little economic analysis written and I'm always happy to talk to people about it.

*Erik:* And again listeners, you'll find a sample issue linked in your research roundup email and there's contact information in there if you're interested in a subscription. Patrick Ceresna and I will be back as <a href="MacroVoices">MacroVoices</a> continues right after this message from our sponsor.