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Winter is Coming | Episode 2
Daniel Yergin, Vice Chairman, S&P Global

As EU energy crisis warnings worsen and calls for immediate solutions spread across global headlines, host David Greely welcomes energy icon and Vice Chairman of S&P Global, Daniel Yergin, back to SmarterMarkets™ for a timely conversation examining the winter ahead.

Covering everything from his predictions in *The New Map: Energy, Climate and the Clash of Nations* to S&P's recent Future of Copper Report — Greely and Yergin pack a half hour with insights on Europe's energy crisis, its impact on our road to decarbonization, and what's next now that Winter is Coming.

Daniel Yergin (00s):
Well, the best case is Europe gets to gas storage, and they're running ahead of schedule. I think they're around 85% as we're speaking today, and it's a mild winter, you know, that would be the best outcome. Worst outcome is social breakdown, that governments can't stand the pressure, and a recession turns into something worse than a recession.

Announcer (26s):
Welcome to SmarterMarkets, a weekly podcast, featuring the icons and entrepreneurs of technology, commodities and finance ranting on the inadequacies of our systems and riffing on ideas for how to solve them. Together, we examine the questions are we facing a crisis of information or a crisis of trust and will building smarter markets be the antidote?

David Greely (51s):
Welcome back to winter is coming on Smarter Markets. I'm Dave Greely, Chief Economist at Abaxx Technologies. Our guest today is Daniel Yergin, Vice Chairman of S&P Global and author of the bestselling book, The New Map, Energy Climate and the Clash of Nations, as well as the Pulitzer prize winning book, The Prize. We'll be discussing what Dan has called the second front in the battle for Ukraine in energy war in Europe. Hello, Dan, welcome back to Smarter Markets.

Daniel Yergin (01m 19s):
Thank you, David. I'm very glad to be back with you guys.

David Greely (01m 22s):
Well, thank you so glad you could be here because I want to talk to you about the energy crisis in Europe in particular. Now there was an energy crisis in Europe last winter, and the energy shortfall for this upcoming winter in Europe is looking to be much worse. Last year, there were a number of contributors to the energy crunch this year the focus is very much on the fall in natural gas imports from Russia. Now you've called this the second front in the battle for Ukraine in energy war in Europe. Can you explain why you think we're in an energy war in Europe and how does this change how we all should be thinking about the energy markets this upcoming winter?

Daniel Yergin (02m 02s):
Well, first David, let me say that. I'm glad that you noted that. In fact, this energy crisis did not start on February 24th when Russia invaded Ukraine, which many people do and it really started, you know, roughly a year ago in September of 2021, when the markets really began to tighten because of what I called preemptive underinvestment in conventional energy sources, but then it was an economic development rather than geopolitical, although Russia had begun pulling back on supplies, people noticed that normally Russia prices go up, we put more gas in, but strangely enough, Russia didn't do that and that contributed to higher prices. So, you know, maybe this was a warm up for what was gonna come with February 24th to put the Europeans in a more difficult position, which was one of Putin's miscalculations he thought that the Europe's heavy dependence on Russian energy would mean that they would protest, but kind of wave through Ukraine just as crime and actation had been accepted.

Daniel Yergin (03m 02s):
But this year now Putin is doing something that Russia and before that the Soviet Union said they would never do. They would never use energy as a weapon. They were a reliable supplier. Putin is using it as a weapon now, and he laid out his strategy in June, basically at the St. Petersburg International Economic Forum, surprisingly, explicitly, he said, you know, high prices will call us economic hardship, which will cause social tension and problems, which will bring populous parties to power and change. As he put at the elites in Europe, left unsaid, undermine the coalition, that's supporting Ukraine and that's exactly what he is trying to do and it looks like they have his one victory under his cap, which is Italy where Mario Draghi, who went to Kyiv in a train to commit Italy's support to Ukraine is being pushed out of power by one of the far right parties, which drew from the coalition. So you have this situation now where Europe is reel from prices that people never imagine that they would see.

David Greely (04m 07s):
No, and it's really staggering as you're starting to see the, the prices businesses, small businesses are facing in Europe, as people get these bills for, you know, thousands and thousands of pounds in the UK for one months of electricity and I imagine that's going to be with us for some time and probably get worse. So, you know, from thinking about the energy markets, how is this different from a normal thinking about the fundamentals, when thinking about it as Russia has unleashed energy as a weapon or changed its strategy in that way?

Daniel Yergin (04m 38s):
You know, in a way it reminds of some energy crisis of the past, including the one, the kind of archetype that people talk about, even if they weren't born, when it happened in 1970s, when you had the collision between a global energy crisis and the global geopolitical crisis, and that's what makes this, this isn't just about markets anymore. It's about the whole system under stress, because Putin is using gas as a weapon and as you say, it puts pressure on big companies and it puts enormous pressure on smaller companies. You see, not just in England, but you see people, families closing down their bakeries, their shops, because they can't afford it. You see plants shutting down, fertilizer, plants, other plants shutting down, cause energy's too expensive. So this is, you know, it may not be so well perceived in the United States or other parts of the world, but Europe is in a very difficult situation and it's highly likely by the fourth quarter that Europe will be in a recession.

David Greely (05m 36s):
And I wanted to, I'm glad you brought this back to the 1970s because all of this ties into a much longer history. I know president Putin has long wanted to restore the power and status that Russia lost with the fall of the Soviet Union and the collapse of the Soviet union was in many ways connected with the collapse in oil prices in the 1980s. And so I'm curious, how does, what is happening in Russia connect to that longer history and do you think we'll look back in five, 10 years at, you know, some point down the road when we look back and see this as a turning point that changes the energy markets for decades to come?

Daniel Yergin (06m 14s):
Well, I think it, I think it will change it and again, like the 70, the world, after the crisis in the 70 was different than the world before the world, after this crisis, we can already see it's going to be different. If we go back 30 years, the collapse of the Soviet Union for the first time, the barriers that had gone up in the Bolshevik Revolution came down and you had an integrated global market. I mean, people didn't know that until, you know, February the us was importing half a million barrels, a day of Russian oil for its east coast refineries to help them run more efficiently and produce more product. So everything was basically, there was always politics, but it was about efficiency and you had global markets, you had obviously energy, oil and gas and coal flowing from Russia, but you had investment in technology flowing into Russia, and you had the development of course, of a global gas market.

Daniel Yergin (07m 07s):
And you had, you know, you were gonna have the big four of LNG exporters, Qatar, Australia, the United States and Russia. Well, the barriers have gone up again because Europe has basically said we're through, we're not going to import Russian energy anymore and I think unless there's a major change in Russia, there's no going back from that. But that leaves that they really haven't prepared themselves for that and so can be very difficult for them and Europe just changes and flows. India never imported Russian oil. Now I think it's either largest or second largest importer of Russian oil cause they get it at a discount and so you really have a restructuring of the global markets that's beginning and this notion that there's a single market and investment flows around the world, it's gonna be, it's gonna be a fragmented market just as we're heading more generally into this kind of new era of fragmented and divisive globalization.

David Greely (08m 05s):
Right and you know, your latest of your many bestselling books on the commodity and energy markets over the years is the new map, energy climate and the clash of nations. I'm curious how much of, you know, what we're seeing now were things that you were thinking about in writing the book and what might require a new chapter?

Daniel Yergin (08m 23s):
Well, certainly new chapter, you know, obviously the world changes, but the last sentence at the bottom of Page 78 said Ukraine was the issue that was gonna blow up between Russia and the west in it happened. I didn't necessarily envision that would happen this way, but you could just see that this was a, Tinder box and it was a focus because it really reflected the fact that Putin did not accept the outcome of the cold war. He did not accept the outcome that Ukraine was a separate country and gas was so intertwined with it. Why Russia was building Nord stream and Nord stream two. One of the primary reasons was so not to have to send gas through Ukraine, through which most of their gas, you know, historically had gone to Europe and I wrote in the book a lot about how this relationship between Putin and Xi has developed between Russian and China.

Daniel Yergin (09m 18s):
And I had a scene describing in the book describing being at that St. Petersburg's conference in 2019 and watching when Putin's guest was Xi and Putin began the conversation by apologizing. He said, you know, president Xi kept you up until 4 o'clock your time talking and Xi said, we never have enough time to talk and I thought, what do they talk about. One of the main things they talk about is they don't like the international global economic and political order that in their view, US dominates. They don't see it as a multilateral system and, you know, and that's what we see now is Russia's basically headed to become an economic dependency of China. The other thing that I wrote about was, which is unfolding right now, explaining why we're seeing this movement from what I call the WTO consensus in which China, United States, were all in this together is, you know, all benefiting from globalization and China would be a responsible stakeholder and all those terms that were used to now this great power competition and explaining how this came about and why and where I think that the next crisis could be.

David Greely (10m 30s):
I'm fascinated to get your take on what policy makers in the west may be thinking, because so far the response to the shortfall in Russian gas has largely been left to market forces with market prices, directing these, you know, massive volumes of LNG from the US to Europe, rather than a government directed Berlin airlift type operation. When you speak with many policymakers, do you think they realize the seriousness of this situation?

Daniel Yergin (10m 58s):
Well, I think certainly let me divide in two parts, the Europeans and the US, Europeans absolutely because they're living with it and those consumers are also voters and very concerned about social disorder that can and they're struggling to figure out, well, how do you manage this, now the focus up till now has been, get as much gas to the storage for the winter as you can, that has contributed to the higher prices. But now the question is, they're saying, how do we cap the prices, do we cap them, do we subsidize, do we send money to consumers, how do we handle that and that's what they're struggling with now. So you're gonna hear a lot about price caps of one kind or another, the US proposal for price cap on Russian oil, the European proposals for price caps on natural gas or windfall profits.

Daniel Yergin (11m 47s):
So you're gonna see a lot of intervention in markets and, you know, it's driven by the reality that this is you know, way outside, you know, any of their scenarios that they were working with and a lot of the interventions may cause further distortions in the market. I mean because it's really the unknown. I mean, how do you, you know, price caps can among other things, you don't, you screws up to price signals for consumers and for investors. The US it's a kind of big turnaround is that you had a Biden administration that came in only focused on climate, then turning around and saying to domestic oil producers, could you increase production, please, at least for a short time, at least while we need it right and sort of rediscovering you know, the fact that the world run runs 82% of world energy is hydrocarbons.

Daniel Yergin (12m 38s):
And of course the other responses you've had in the us is so called Inflation Reduction Act, which doesn't seem to have much to do with inflation, except maybe it'll drive up the cost of minerals, but a lot to do with it should really be called in 2022 Industrial Policy Act,

which is pretty massive intervention in the energy markets and an effort to change them and you know, whatever the estimates of the money that's destined to be spent, you know, it's gonna be a lot end being a lot more than that, cause it always is.

David Greely (13m 12s):
Right and do you think this is an energy war that Europe and the US can win and at what price?

Daniel Yergin (13m 19s):
Well, I think it's a dicey situation because you know, Putin from his point of view has to win his war and breaking the coalition has to be a central objective of it, creating confusion and disarray. So he's gonna throw everything into it. I think the end of the day, the Europeans I think are gonna hang together because they look at the Ukraine war as a war in Europe and there's lots of apprehension about, well, Putin succeeds here, what's next. So they can't be allowed to win. So that's why, you know, it's very hard for people to see what the way out is here and of course it's made more complicated that one side has nuclear weapons. Of course the other side NATO has nuclear weapons too, which is, you know, has caused terror and then you have this nuclear power plant, which the Russians are treating like war booty and with grave, grave danger and higher responsibility.

Daniel Yergin (14m 18s):
I mean, I think if something bad happens with that, I think the west really needs to say that basically Putin use nuclear weapons, but in a different form. But I think that you know, I think it's getting through the next few months will be the really critical element and there is a new player in the global energy market now and it's called the US Federal Reserve and the other Central Banks and you have seen already permeating prices is expectations of stagnation or recession bringing down prices and the prices are very volatile and things could change tomorrow, but you know, prices would come down further if there's an Iran nuclear deal and more Iranian oil prices would go up if China actually got out of COVID and went back to with old levels of oil consumption, but I think that federal reserve that is relentlessly raising interest rates is gonna be a form of price management,

David Greely (15m 19s):
A slower economy to take down demand rather than higher prices and it sounds like Putin won't back down, Europe needs to hang together. Do you think Europe needs to be on some sort of energy war footing or like what does that even look like rather than just let prices go up?

Daniel Yergin (15m 38s):
Well I think it, you know, it would be the Germans have certainly been talking about, and not only the Germans, but the imminence of some kind of rationing and I think Germany has been preparing for that, you know, decide who gets gas tough to do who are the priorities because you don't want to short change industry and have unemployment, but I think that would qualify as a war footing. I think intervention, the market price caps, that's like a war footing and some have compared, you know, the kind of intervention we're now seen by the US government comparing it to sort of the war footing intervention of almost World War II, you know, to have that degree of intervention, but you know, this is now this is economic life and death for Europe right now and it's political and its survival for its political leaders. I mean the people, other people holding office don't want to be the next scenario driving.

David Greely (16m 37s):
All right. And so, you know, putting all that together, what's your outlook for energy in Europe and more broadly this winter and what do you think are the best and worst case scenarios within reason that are in play?

Daniel Yergin (16m 52s):
Well, the best case is Europe gets to gas storage and they're, you know, they're running ahead of schedule. They're like, I think around 85% as we're speaking today and it's a mild winter that, you know, that would be the best the best outcome, worst outcome is social breakdown you know, that it just becomes governments can't stand the pressure. A recession turns into something worse than a recession. I think that's their, you know, where we are now, you know, Putin thought the war would be over in three days his officers on the way to invading on way they thought the Kia carried dress uniforms for the ceremonial parade, didn't turn out that way. So, you know, World War 1 was supposed to be a short war, turned into trench warfare. So we don't know and there's the additional dangers that Russia is a nuclear power and Putin has four or five times failed and not so veiled ways talked ways talked about using nuclear weapons. He seems to back away from that now because of course he doesn't repercussions would but that certainly, you know, they're gonna get even worse scenarios, but I prefer not to go there. I prefer to go with gas storage filled and warm winter.

David Greely (18m 15s):
Yeah, yeah. It's terrible to be in the situation where, you know, you need to, to pray for warmth

Daniel Yergin (18m 20s):
Yeah and you know, and from an energy point of view, you know, relieving the pressure on Europe, not a recession, but a economic slowdown where it takes and the people behavioral responses. I mean, we do see price responses. Gasoline demand in the US now is, you know, maybe 6% to 8% less than it was this time last year. So we shouldn't forget. Every price is a little piece of information that tells people what to do, you know, higher gasoline prices, you know, hit teachers, nurses, people driving to work, but now gasoline prices are down and partly it's because people have found ways to reduce consumption. So I think prices itself is an important actor here and kind of you know, they always say the solution I. What is the solution, high prices is high prices because they bring low prices.

Daniel Yergin (19m 14s):
But I think there's, I think there's a larger question just to add to it though. I think there is this larger question about investment two questions. One is that you know, of under invests a real problem cause energy, oil and gas demands gonna continue to grow and you know, you can't tell emerging markets, they can't have energy and one of the things I write about in The New Map is the, the merchants of this new north south divide. We're developing countries say, Hey, you can't tell us that we can't use natural gas instead of having people burn wood in indoor cooking, you won't finance that. Oh, but by the way, you do want to finance more natural gas terminals. So I think that's there, the other thing that I've been working on, I talk about it in The New Map and continue to work on it is this move from that term we hear a lot about when prices are up big oil to a world of big shovels mining.

Daniel Yergin (20m 10s):
And we at S&P Global have just concluded this big study on copper and it's very interesting, David. We said, okay, take the Biden 2050 goals, take the EU 2050 goals. Okay and then say what does that mean, technology by technology and sub technology by sub technology and how much copper do you need and we picked on copper because copper is the metal of electrification and we saw that you get this energy transition demand on top of existing demand and guess what there's not enough supply. Basically supply would have to double to meet the demand that's embodied in these goals by 2035 and look at Chili it has a new president and they're looking, you know, their aim is to tax copper production more and restrict mining, put limitations on it, make permits harder. So, you know, why does Chili matter because Chili is the source of 25% of the world's copper, Chili and Peru together are 38% of the world's copper 42% is smelted in China.

David Greely (21m 16s):
Yeah. It's becoming energy security is becoming metal security?

Daniel Yergin (21m 21s):
Absolutely and the notion, okay. So, you know, the Biden says, well, we've got to fix that well. The amount of copper produced in the United States over the last couple decades is declined by half, try and get a permit. Well try and get a permit to do, build anything in the United States, but try to get a permit to do a new mine and you know, the IEA says the international energy agency says it's 16 years on average from discovering a resource to first production, but they left out the other the next 15 years of litigation as it works its way through the courts in the United States.

David Greely (21m 57s):
Yeah, I'm so glad you brought up that report. The future of copper such a great report and I was fortunate enough We had Robert Friedland on the podcast a month or two back, you know, from Ivanhoe Mines talking about just that issue of, you know, this, what I call Plan A for the energy transition, which is we're gonna electrify everything and we're gonna power it by, you know, low carbon alternatives, renewable solar wind, that if you sit down and work through the arithmetic, like you've done, you start to realize, wow, we don't have nearly enough of the metals and minerals and copper and everything that we need and I think Europe kind of shows, you know, that premature transition to some extent we saw that last winter. So now that we have this energy war in Europe, creating a severe shortage of our current energy supply and a lack of investment and shortfall in metals, it's gonna likely create a shortage in what we need to transition to a low carbon energy supply. How are you thinking about all this and, and what it means for the future in terms of an energy transition?

Daniel Yergin (23m 01s):
Well, I think that the inflation reduction act actually, you may see what people are not anticipating if we can generalize from copper is that you're gonna see a lot of inflation in the cost of the materials that are required for the energy transition, that it may end up getting more expensive because obviously now people have looked at and said, wow, I mean, it's incredibly dramatic cost of solar down 90% wind costs going way down and so people are now just extrapolating, oh, those costs are so cheap will continue. Right. But you know, if everybody rushes to the same side of the boat at the same time, you know, it happens, it's not smooth sailing and I think that this question of where you're gonna get the materials from is just, you know, half the world's cobalt comes from the Democratic Republic of the Congo. You go down the list and just permitting issues around the world.

Daniel Yergin (24m 00s):
You talk South Africa, they'll talk about permitting issues, everybody. So it's, it gets harder to do this and then you just need so much more, you know, in the copper study we said, okay, in new supply, greater efficiency in mining and recycling, those are all the elements, but you know, recycling, I mean a lot of steel, you know, iron steel can be recycled, but these other things, you have to gather all the stuff, you know, on scale. So, and I think people, you know, it was really interesting looking at copper because actually copper is not on the critical minerals list of the US government, which is really odd because I don't think they looked at it as you said, this about electrification and copper is a metal electrification. You need it. So I think that that this assumption that just you can do all of this really quickly, that everybody can have an electric car and offshore wind and all these other things.

Daniel Yergin (24m 57s):
I know electric car takes at least two and a half times more copper than a conventional car and maybe with innovation, they can reduce it, but that's two and a half. So I thought when California declared the other day that all cars sold in stated have to be electric by 2035. I said, okay, let's multiply every one of those, whatever the amount of copper let's multiply it by 2.5, you know, did they figure that in the legislation probably not, but copper is a good example because you just see, you see where the supplies come from and then of course there's a famous phrase called the obsolescent bargain. You let's say David Greely Inc. makes an investment in a developing country and you have a festive dinner and signed the papers and everybody agrees on it and then it goes on and the price goes up and down in the market. New government comes in that has no vested interest in the deal and says, well, they made too good of a deal to get you to invest your money here. Let's change it because you've already invested and so the bargain you have becomes obsolescent and suddenly the cost and everything go up. So I think as sure as the sun rises, that's what's gonna happen with, as these minerals and resources become more important for the energy transition and I think most people just are not thinking about in the context of how economic history unfolds.

David Greely (26m 21s):
Yeah and I wanted to, just before you go asked you about how policy makers may be thinking about it, because there I find there's this interesting split where you've got people like yourself, people like Robert Friedland, people who are in the commodities, energy world, who are used to thinking about how you do a project and thinking in terms of tons of metal and barrels of oil and you know, that sort of arithmetic and then on like a little bit more of the climate side there seems to be a consensus that we can pull off the energy transition and it'll cost somewhere around 2% of GDP over the next, you know, 20, 30 years and I loved your point about like, yes, solar wind prices have come down, but if you start running out of the cobalt and the copper and all the other materials you need, those prices are gonna shoot right back up and it seems like some of the, the 2% mindset probably is extrapolating the low prices we see at current scale, but not taking into account the sheer level of investment, the risk of the investment.

Daniel Yergin (27m 22s):
Yeah. That's a very, very good point. It would be interesting to say, okay, take your 2% or, and do another scenario in which the prices of those inputs go up to 4% a year or something like that over a period of time and then tell us if what your 2% does become 5%. What, you know, how does this work. I mean, it's a massive achievement that solar costs have come down so much and thank you China, because China produces 80% of the solar panels and they brought those costs down and you're also going to run into the globalization issues. You know, one reason costs have come down is because you had globalization, you had the efficiency, let's, you know, the, get the cheapest solar panel from China, not really worry about production elsewhere. Well now, sorry. No, we don't want to be so dependent upon China.

Daniel Yergin (28m 15s):
China has its own calculations as well and you know, there's a price for security and we don't know what that price is gonna be, but it's, you know, it may be higher than people think. So I think one needs a little more modesty about the assuredness with one can speak

about how an energy transition will unfold and one of the things I did in the New Map, I said, okay, energy transition and I look back historically at all. The energy transitions what's been talked about now is not like any energy transition would've had because oil overtook coal as the world's number one resource in the 1960s today, the world uses three times as much coal. Well, now you're talking about, I think you before talking to A and B you're saying, okay, here's A, we're gonna chuck A and just have B that's never been done and do that in 28 years in what today is about an 88 trillion world economy that could be 150 trillion world economy by 2050 that's today, 82% dependent on hydrocarbons. I think you need to be at least a little modest about getting that done. The real world tends to be a little more complicated than scenarios or PowerPoints.

David Greely (29m 27s):
Thanks again to Daniel Yergin, vice Chairman of S&P Global and author of the bestselling book, The New Map, Energy Climate and the Clash of Nations, as well as the Pulitzer prize winning book, The Prize, we hope you enjoyed the episode and don't forget to read the future of copper, will the looming supply gap short circuit the energy transition available free from S&P Global. Please join us next week when our guests will be Doober. We hope you will join us.

Announcer (29m 53s):
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