

# Episode 188: Infrastructure Investment Opportunities with Joy Perry

**Host:** Patti Brennan, CEO

**Guest:** Joy Perry, Wellington Management

**Sponsor:** John Hancock (Tim King)

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**Patti Brennan:** Hi everybody, welcome back to the Patti Brennan Show. Whether you have \$20, \$20 million, or \$200 million, this show is for those of you who want to protect, grow, and use your assets to live your very best lives.

I am so excited to bring our guest on today. Her name is Joy Perry. Joy is with Wellington Management and she has been brought to us by our friends at John Hancock, specifically Tim King. Tim introduced Joy to our investment team, and we have learned so much about this broad term called infrastructure.

Just a little bit more about Joy: she's been at Wellington Management since 2011—you don't look old enough to be there that long—and before that, you were at Cambridge. So a great background. Joy went to Wellesley where she got her undergrad in economics and French cultural studies. That's pretty cool, dual major, right? And then you went on to University of Virginia, UVA, to get your MBA.

Thank you so much, Joy, for joining the show. What a joy it has been to get to know Joy Perry.

**Joy Perry:** [03:47] Well, thank you for having me.

**Patti Brennan:** [03:55] Yes, go Hoos, right?

**Joy Perry:** [04:05] Yeah, yeah. Yes, go Hoos.

**Patti Brennan:** [04:25] So let's start off, Joy. I listen to a lot of podcasts and it seems like everybody is talking about energy, clearly because artificial intelligence uses up a ton of energy. And you taught us more about infrastructure, the overall term. So what does that involve? What's included in that general term?

**Joy Perry:** [04:53] Yes, well, infrastructure—you can think of infrastructure as long-term contracted stable assets. They typically are physical in terms of their nature. So we consider them to be things like utilities, energy midstream and infrastructure, which helps to facilitate power. It

also includes transportation along with data infrastructure, which ties into your comments about AI and all of the data center demand conversations that are happening across the market.

**Patti Brennan:** [05:30] One of the coolest things that you taught us was this concept of getting exposure because everybody's talking about the MAG-7, but geez, they're really richly valued. Is it too late? And I love the way you framed this whole idea of infrastructure as a way to get exposure to the MAG-7 without investing directly in the MAG-7 and taking all that risk. And the term you used is that this is a "sleepy, stable asset class." Love that. So tell us more about why you feel that way.

**Joy Perry:** [06:09] Yes. Well, when you think about AI and data center demand, one of the things that we keep coming back to is the fact that all of this is going to result in more power. We need power to drive the innovations that we're seeing in technology today. And what that's doing is creating a really exciting opportunity because for the first time, pretty much ever—certainly in the last 20 years—we're seeing an increase in power, specifically electricity demand.

That's being driven by everything we just talked about in terms of the technology sector, but it's also being influenced heavily by the energy transition and the focus globally on decarbonization. So there's a great opportunity to get exposure to the companies that are ultimately going to power and produce the energy that's going to drive and enable AI and data center growth, and that's through infrastructure companies. And typically, infrastructure companies—given I mentioned earlier that they typically are long-term contracted assets with very stable cash flows—can provide investors with a really compelling risk-return profile, particularly in the current market environment.

**Patti Brennan:** [07:32] It's so interesting because what we learned from you is that companies like Alphabet and Amazon are investing in energy. And I think you also shared that a company like Meta is looking at investing in something like Three Mile Island, which is locally here in Pennsylvania. That's really interesting to learn that these companies recognize their need for electricity and are just going to solve for it themselves.

**Joy Perry:** [08:04] Yes, and I think that really illustrates this dynamic that we're seeing right now where after essentially no growth in power demand for the first 20 years of the century, we're now seeing power demand growth specifically for electricity on the order of about 3.5% to even 4%.

So you do see companies like Microsoft engaging in the restart of Three Mile Island, or Meta just contracted with a company in Illinois to extend the life of an existing nuclear asset. Companies recognize that they need to take steps to ensure that they have the power and ultimately the energy to enable their operations. And so we're seeing really historic deals between technology companies and power and utility providers, which is really indicative of this current opportunity that we see in infrastructure today.

**Patti Brennan:** [09:07] And it's very interesting because when we think about utilities, most people think about yield. And what we learned from you is that, yes, that's fine, and that does give you a much better risk profile. These companies tend to have much better drawdown capture—meaning less drawdown, less volatility—but also for the first time, as you said, in 20 years, there is tremendous opportunity for capital appreciation and growth because of the demand.

So now let's talk about the negative side of all this. And that comes in the form of our bills, our electric bills. I don't know about you, but I was in sticker shock when I got our electric bill this month. It was up like 30%. And that's true throughout the country, isn't it?

**Joy Perry:** [09:49] Mm-hmm.

**Patti Brennan:** [10:03] Now, let's talk about this: is this a US issue because we're so focused on technology and artificial intelligence, or is it worldwide? I know that two countries in Europe had power outages that really impacted those companies and those people, right?

**Joy Perry:** [10:27] You're certainly referencing the blackout that we saw in Spain and Portugal back in the spring. What's been really interesting there is it's a great case study in the need to continue to invest in our infrastructure and specifically in our grid. Spain's grid is quite old—it's about 40 years old.

And you've also seen in Spain a real move to renewables. Now, I love renewables. I think that there's a tremendous growth opportunity. They're critical as we think through the energy transition, and they're an important part of the generation mix. But there are also obvious challenges. Like if you're powered by solar, well, unfortunately, oftentimes the sun is not actually shining when power demand is the greatest—in the evening.

**Patti Brennan:** [11:23] I always wondered about that. What if it's not sunny? How are you going to get your power? It's risky, right? How do you build something that's resilient and not so risky? Because I'm cold.

**Joy Perry:** [11:26] Exactly, exactly. You want to be able to rely on the fact that when you flip your lights on, they turn on, or that you're able to run your dishwasher or your washing machine and use your computer. And so what that really highlights to us is, first of all, the need to continue to invest in the infrastructure that powers the grid, but also the need to invest in generation sources outside of renewables. So pairing renewables with natural gas, or even nuclear like we talked about.

And it's hard to forget that nuclear was not really part of the conversation until very recently. It was a lightning rod for many individuals and investors up until just a couple of years ago. But because we're in such an environment where the demand for power continues to increase, we really need it. It's a very low carbon, reliable source of power generation.

So Spain and Portugal highlighted the need to continue to invest, but also the need to not just rely on renewables, but instead to pair renewables with fuel sources like natural gas or nuclear. But as you mentioned, this is not just a US thing either.

**Patti Brennan:** [12:59] Right. And I understand that they are spending more money investing in their energy sources. I mean, let's face it, you go to Europe, they don't even have air conditioning, right? So imagine what will happen once that even takes hold. So we take a lot of things for granted.

The other thing that you taught us here at Key Financial, Joy, was that the grid is not really a grid. It's actually hundreds of grids that are not really sewn together very well. I've known and heard that the grid is vulnerable. So can you tell us a little bit more about that and what needs to happen from that perspective?

**Joy Perry:** [13:32] Yes. So I think it's a misconception that there's just one grid in the US because that's not the case. It's totally understandable. But the US power market is very regional in the US. And so we do need to invest in the individual regions where they're also seeing different levels of power demand. There are also vulnerabilities to prices and cyclicalities, which is also why customers and consumers across the US have different experiences when they get their bill each month.

But there's been a lot of focus across the companies around ensuring that they're protecting against cybersecurity, for instance. That's been a focus. That's a really hard risk to completely mitigate, but the companies and the utility companies are working to try to understand that risk.

But when you take a step back and you think globally, one of the things that has also been a real focus over the last three years—really since Russia invaded Ukraine—is this focus on energy security and independence and the fact that countries globally want to ensure that they have a reliable power source that they're not reliant upon any one country or region. And so that's creating a huge opportunity for the US to actually send natural gas to Europe and Asia in the form of LNG. But that's been a huge focus for the power markets over the last couple of years and an area of vulnerability for the global power market.

**Patti Brennan:** [15:40] So here's a question. Is it true, or did I just hallucinate this? Is it true that the US will never run out of natural gas?

**Joy Perry:** [15:50] Well, I don't think we want to say never, but we have an incredible resource here in the US. So we're lucky to have very plentiful natural gas resources that are also very low cost. And so we're seeing a lot of growth, particularly in areas like Texas. So we're seeing Texas grow quite quickly, partially because they have access to such low-cost energy. And so that's really benefiting them and why we're seeing tremendous growth in the Texas area.

**Patti Brennan:** [16:33] Okay, I'm going to reveal my ignorance, which you already know is rampant. Can you tell us the difference between—what is natural gas versus oil? I think of Texas, I think of oil. So what exactly is natural gas? Is that what you get from this thing called fracking?

**Joy Perry:** [16:55] So it's really interesting because you can actually get both oil and natural gas from fracking. So Texas has an extensive amount of oil reserves, and you actually get natural gas as a byproduct when you drill for oil, particularly in regions like the Permian Basin in Texas. So they are somewhat synonymous.

**Patti Brennan:** [17:20] Is it a gas? Is it a vapor? Is that what it is?

**Joy Perry:** [17:29] It is. It's a gas, yep.

**Patti Brennan:** And how do you bottle it? How do you package it?

**Joy Perry:** Yes, yes. Well, so that's why you oftentimes hear people talk a lot about LNG, which is liquefied natural gas. So if you think back about 15 years ago, the US was actually building all of these facilities to import LNG. So we didn't actually have enough natural gas and we were planning and positioning ourselves to be able to bring natural gas from other countries into the US.

Then we really learned the power of areas like the Permian Basin in Texas or the Marcellus region in the Northeast, which is another really rich gas basin. And all of a sudden we realized we had more natural gas in the US than we need. So we've been converting those facilities that were originally intended to import natural gas to actually export the gas. So to take the gas and turn it into a liquefied state so that it can then be transported and sent to Europe and Asia where there's a tremendous demand, particularly given the lack of natural gas coming from Russia.

**Patti Brennan:** [18:55] That's really interesting. I think we are in an interesting political environment where the US has tremendous resources and these nations want to be able to trust us to be able to deliver when they need it, and we're using it as leverage, it sounds like. So it doesn't really support their desire to be energy independent if they're getting their natural gas from the United States.

**Joy Perry:** [19:28] Well, there's a desire to move away from a reliance on Russia in particular and to diversify where their gas is coming from. So it's not necessarily—

**Patti Brennan:** They want to have different outlets to go to. That's what I'm hearing. And it sounds to me like they're more afraid and less trustful of Russia than they are of the United States.

**Joy Perry:** [19:47] Exactly, exactly. Yes, so that's been the big concern over the last couple of years. There was a tremendous amount of reliance on Russian gas up until 2022. And now there's this desire to diversify where that gas is coming from, to reduce your reliance on Russia specifically, and also to introduce more of a stable trading partner or a source for that gas.

**Patti Brennan:** [20:31] You know, it's really interesting, Joy, because you think about 15 years—that's really not a long period of time where we thought that we would need to import natural gas. And then through technology, innovation, discovery, we realized that we have plenty, thank you. We don't need to import it. And it makes me wonder what else is out there where innovation is going to be discovering new resources, assets, things of that nature. It's just really kind of an exciting time to be alive. A lot of people are worried about their children, but I think it's an exciting time to be alive.

So we talked about artificial intelligence, but there are other sources, other energy hogs that you shared with us. Quantum computing, cryptocurrency, things of that nature. In terms of—and I don't know if you can give us percentages—but you think about how much energy does artificial intelligence use up, like ChatGPT, OpenAI, versus the companies, Meta, Microsoft, versus cryptocurrency and quantum computing.

**Joy Perry:** [21:48] Yeah, well, so here's a fun statistic in case you have any parties or cocktail gatherings coming up: ChatGPT is 10 times more energy intensive than a simple Google search. So what we're talking about here is energy-intensive technological advancements.

When you think about where this demand is coming from, the vast majority is coming from data center demand and AI—call it about 75% to 80% of the demand. But I also think an underappreciated source of the demand is also coming from this effort to reshore or onshore manufacturing. So that can account for upwards of about 15% of the demand, which is meaningful. And then some of the remainder is driven by crypto or digital assets. But obviously some of this is highly regionally dependent. But I think that focus and the impact of manufacturing is also underappreciated in terms of the broader picture. And that's obviously also a big focus and push of the current administration.

**Patti Brennan:** [23:11] So what are other countries doing about all of this need for energy? China, India—you think about all the people that reside, live in those countries. What are they doing in terms of investing in infrastructure?

**Joy Perry:** [23:27] Yeah, well in China for instance, we're seeing a real focus on moving away from fossil fuels, specifically oil. So we're seeing them really invest in natural gas, we're seeing them invest in renewables. They also don't have the legacy infrastructure that many of the developed countries have in terms of internal combustion engine vehicles.

One of the things that's been amazing to us is when we've traveled to China to just see the level of electrification, the number of EVs that are on the road relative to what you see when you

might be driving around Boston or New York. So it's quite impressive, but there's this real focus—

**Patti Brennan:** [24:14] That's really interesting because you think about what our perception of China is and the smog and the fact that they've got coal and all of that. And I didn't realize that they had adopted electric vehicles as much as they have. Do you think that's in response to what's happening to their environment or do they just like those cars more? And it's easier because they've got the stations to be able to power them back up again.

**Joy Perry:** [24:48] Well, I think the fact that they, again, didn't have the legacy infrastructure and could really just build out the electric infrastructure to support EVs is a big factor. Also, the price point for EVs—there's some really attractively priced EVs that are sold in China that have helped really increase adoption rates.

But we all hear about the climate crisis in China and the smog and the challenges they have with air quality. So I think it can be easy to say that China is really focused on reducing their carbon emissions. But that's actually—I don't think that's the biggest driver.

**Patti Brennan:** How about India? What's India like?

**Joy Perry:** [26:57] So India is also working on building out their infrastructure and introducing newer forms of power generation. So they have an industry and an economy that's heavily reliant upon coal, but also even fuel sources like wood. Their build-out is going a little bit slower than what we've seen in China, but it's something that we're still really watching, as we are watching emerging markets more broadly, given that as countries gain wealth, there's a need to continue to build out their infrastructure to support that wealth.

**Patti Brennan:** [27:35] So I love your idea of an investment like this being a derivative—of getting exposure to what's happening in technology without having near the risk. So from your perspective, as we are adding this to our portfolios, is there a percentage that you would recommend? Because a lot of advisors listen and watch the show. I'd be curious from your perspective: how much to allocate and what are we replacing?

**Joy Perry:** [28:05] Yeah, so that's a great question. We see the funds really being used in a couple of different ways. We see it used as part of a real asset allocation where the goal is to really provide an inflation hedge, particularly in the event of unexpected or rising inflation. And we find that a listed infrastructure allocation is a really nice complement to what investors oftentimes have on the private side. Infrastructure has been really quite popular in the private markets over the last couple of years. So having a liquid allocation to help fund that private exposure makes a ton of sense.

But as we take a step back, given the fact that we're seeing this incredible growth opportunity across infrastructure, it's happening at a time when valuations are attractive, and you get this nice



risk-reward framework through the fund. We're also seeing allocators add it just to their global equity allocation as a more stable diversifier. So I think a couple of percentage points makes a lot of sense. And obviously, it comes down to also how you're constructing the portfolio and the size of these allocations. A couple of percentage points can make a big difference in terms of your total portfolio.

**Patti Brennan:** [29:29] It sure can. So you think about real assets—that would be real estate, it could be gold. Everybody's talking about gold right now as the hedge against inflation. I kind of like this a lot more because you get the dividend, you get that yield, and you've got the growth opportunity that's going to be reflective of rising prices, rising demand—supply and demand that really comes into play here.

And what do you think about it as a replacement or a complement to cryptocurrency like Bitcoin or some of the ETFs that have come out? Do you see that happening?

**Joy Perry:** [30:08] I think it could make a lot of sense, again, because it's a derivative of some of the growth that we're seeing in the technology space. So I think it's a little bit harder to convince me that cryptocurrency is a real asset or a hard asset. I know that there are a lot of converts out there, but I'm not quite sold on that allocation within the context of an inflation hedge.

**Patti Brennan:** [30:33] You know, it's so great to hear that from Joy Perry because I was just testing the waters. I will tell you that we have not invested in crypto, but now, of course, same thing when it goes up after the fact, everybody's like, "You got to allocate 5%, 10%, 20% of your clients' portfolios to crypto." Now there are ETFs, yada, yada, yada. And it makes me wonder—it's so volatile and I don't want to be investing after the fact. There's value other places where clients can have a better outcome without the volatility and having to go through all of that up and down and up and down, right?

**Joy Perry:** [31:21] Yes, I just don't think we know enough about cryptocurrency and digital assets to really understand how they're going to behave in an inflationary environment and if they're really going to provide that store of value that we particularly look for from assets like gold. So we might get there, but it's still a little bit too early for me, but that's just my opinion.

**Patti Brennan:** [31:41] Yes. Even in the bursts of inflation that we've had over the last five years, it hasn't really shown to provide value in those periods of time. So it's more about the story, I think, than it is about the real value. And we could talk until we're blue in the face. Again, we don't understand it quite yet. And I'm willing to take the risk that somebody can come back and say, "I told you so," and that's okay. Because in the meantime, we've allowed our clients and we have participated in growth overall.

And especially with a fund like yours, you're getting that nice dividend that comes from infrastructure companies, as well as—I know that you guys at Wellington Management are focused on growth. And that's what makes you different. And I love different. I love taking that



sleepy stable asset that you refer to and creating real value over time. Maybe not every time, but over time.

**Joy Perry:** [32:51] Yes, I think that's exactly it. So thank you for summarizing it so well.

**Patti Brennan:** [32:55] So here's the last question I'm going to ask you, Joy Perry. Is this just a 2025 phenomenon? How long do you think this energy transition is going to last? And how long do you think the investment opportunities are going to be there for all of us who are recommending investments in infrastructure? Is it short term, medium, or longer term?

**Joy Perry:** [33:21] No, I think this is a long-term investment opportunity for allocators. I mean, when we look out, we're seeing that 3.5% to 4% growth out to about 2050. So we're talking about several decades because the energy transition is so massive. We're making a significant shift from hydrocarbons to electrons, and that's going to take time. It's also going to be bumpy. It's not always going to be straight up into the right.

But what's really exciting is that there's this structural transition that's occurring, and then you're getting this additional growth from the technological innovations that we're seeing in the demand coming from AI and data centers. So I think this is a long-term, multi-year opportunity for investors. And given what we're seeing in the market today, valuations are currently supportive of that. Even though we've seen some strength out of infrastructure over the more recent past, the opportunity is by no means done. And if anything, it's looking even more attractive as we look forward. And many of the regulators in the US and outside of the US recognize that they need to be enabling the companies, the utility sector for instance, to really grow. And so they're raising their allowed rates of return, which is also confirming to us that there's still a long runway here.

**Patti Brennan:** [34:57] And you brought up a point that I forgot about, and that is this is a regulated asset class. So you've got those guardrails out there. And like it or not—I mean, there's regulation in our industry—but I will tell you flat out, I believe some of the regulations have made us a better business because of those boundaries. We just have better structure, better processes, and that much more accountability because we know we can be called out on the carpet at any time. So that is a really interesting thing.

So based on what you said and what you're feeling—and nobody knows for sure, nobody, I don't think, knows how to see around corners yet. We certainly don't—but it feels like we're sort of where we were at the end of the sixties and then the seventies happened. We didn't know what was going to happen with the gold standard, but boy did we see massive growth in inflation and companies that benefited from the supply-demand imbalance.

So thank you so much for joining us today. This has been fascinating. Thank you for everything that you do for our firm, for teaching us, and for Wellington Management. John Hancock, Tim King, for bringing you to our attention so that we can recommend this to our clients.



Again, I've always learned when it comes to allocating resources, it's always better to be early. And while we may not be super early, it certainly is—call it first, second inning, to use that baseball metaphor—who knows? But in the meantime, you've got great companies, a derivative where you're investing in decent valuations and getting a good yield and the expertise of Wellington Management and Joy Perry.

So thank you so much for joining us and bringing your intellectual capital to all of us here on the Patti Brennan Show.

**Joy Perry:** [37:12] Thanks so much for having me. It's been a pleasure.

**Patti Brennan:** [37:14] And thanks to all of you who are listening to our show today. I hope you've learned something as we have, as we look at this really important asset class for the future of our families, our companies, the United States, and the world at large.