

Ep. 7 - Energy Evolution: Economics, Policy + the AEC Industry

Jad Sobh: You're listening to *Ground Breaking: Where Consulting Meets Innovation*.

Jad Sobh: Welcome back to *Ground Breaking: Where Consulting Meets Innovation*. My name is Jad Sobh.

Peter Nabhan: Welcome, and I'm Peter Nabhan. If you're tuning in for the first time, Jad and I work for ECS Group of Companies, a nationwide engineering consulting firm.

Jad Sobh: We're thrilled to have Fernando Nando Gomez Jr., Mark Vitner and Derek Clyburn joining us today. Nando is a vice president of strategic initiatives for the American Council of Engineering Companies, ACEC. He drives strategic initiatives to position the consulting engineering industry ahead in the rapidly growing energy sector. With extensive experience in advocacy, legislation and international markets, including roles at Honeywell and on Capitol Hill, he brings a wealth of expertise to advance critical industry priorities. Welcome Nando.

Nando Gomez: Glad to be here.

Peter Nabhan: Mark is actually the founder of Piedmont Crescent Capital. He's a seasoned economist with decades of experience analyzing US and regional trends. Today, I learned that Mark started his entrepreneurial journey at the age of 10, selling candles. That's something I just learned. Mark's also formerly a managing director and senior economist at the Wells Fargo Corporate and Investment Bank. His work has been featured in major outlets like the Wall Street Journal and CNBC. Mark is also a certified business economist and active community leader. He holds advanced degrees in economics and has contributed to influential advisory boards, including the Blue Chip Economic Forecasting Panel and Virginia's Joint Advisory Board of Economists. I did some research, Mark and I also learned that you studied under Richard Timberlake, which I thought was very cool because he was a student of Milton Friedman. He's a legend in the world of economics. So, thank you for joining us, Mark.

Mark Vitner: Yeah. Thank you, thank you and thank you for that diligence.

Jad Sobh: Derek Clyburn is a principal engineer at ECS and the chief executive for ECS Southeast with more than 25 years of experience in engineering and business strategy. A dedicated advocate for the engineering industry, he has held key leadership roles with the American Council of Civil Engineering Companies, including the president of ACEC NC. He currently serves as the vice chair of the ACEC National PAC. Welcome aboard. Happy to have you here. Thank you.

Derek L. Clyburn: Glad to be here.

Peter Nabhan: What a strong lineup today. Probably one of our strongest lineups so far. Today, to set up the framework for the day, we have a goal or target to dive into the administration, the new administration and how that's tying into energy, real estate development on the legislative and economic policy standpoint. Both topics we think are going to be affecting our industry in a big way in 2025 and in the next few years. What we're hoping to do is to learn

about your respective fields, Nando, your expertise with legislation, Mark, your background in economics and see if there's a congruence between the two, which I learned this from you, Nando, the connective tissue that you mentioned. We're hoping to learn a bit how it affects the AI push that we're seeing and data center development. So before we get to that point, I want to start off by talking about your respective fields.

Nando, I think one thing that we would like to know is you are an advocate for ACEC; what are some of the key priorities that you're seeing in DC for the AEC industry as a whole? And ACEC is architecture, engineering and construction.

Nando Gomez: Well, I thank for an onset. want to say thank you to Derek and Peter and Mark for the opportunity here. Well, some of the key priorities, obviously and I'll just let me kind of talk about the general priorities within the AEC policy and then we'll get down to the energy side of things. Look, we're facing a new White House and a new Congress, right? And thus there's an excitement and there's some not so excitement because we have to within ACEC is we have to re either establish new relationships or re engage with the with old ones to come back and say, hey, here we are. So the priorities, look, Congress in the White House itself is going to have to has a full plate. They have to deal with a budget bill that expires in the end of March, which is leftovers from the last Congress and White House.

And one of the things that, so that's a priority that we need to fund the government up beyond March 31st and get a budget deal. And then one of the main priorities is tax reform. That's a big issue. And Derek has been a big champion and the folks with the ACS as far as what we can do on tax reform, especially in the R&D space. That certainly is a priority from President Trump and the Republicans who will, by the way, control Washington, DC. This is the first time in about 20 years that you have one party control of both houses, of Senate House and the White House. And as such, they have a very, let's call it what it is, a robust policy agenda. And certainly tax reform is one of the big ones that you will, that certainly is a priority for us given it taxes hits everybody in all our membership within ACEC.

So just diving a little bit further on that, know, energy. We I have been two years in ACEC. I have as I mentioned, I have an AC and energy policy background. But you can see the reason why energy is really a hot topic in market right now. And you can see it from what exactly came out the president's mouth just recently. And the executive orders, which was about 200 of them.

And by the way, you say priority, Peter, we're trying to digest them. what are the ones that are going to have the most impact to our members and ones both positively and negatively and which ones are, think, know, as far as we can interpret, that are going to survive either legally or are going to fall on the wayside and members of Congress are going to raise their hand and going, no, we don't like this because it impacts our state and district. So there's a lot, it's a full plate, but I think there's gonna be plenty of opportunities for our members and that will benefit our members overall. And then obviously that's not withstanding the energy sector overall.

Peter Nabhan: I think we'd also like to see if what's the tie in and maybe this is for you, Mark. What's the tie in with what Nando is mentioning from a priority standpoint and how does that tie into the economic piece that we keep hearing about like this new administration is focused on the economy. Is some of the work on the energy being done that's going to feed into that?

Mark Vitner: Yeah. Well, Trump's got a lot of proposals out there and I spent a lot of my time trying to distinguish between what's likely to pass and what's likely to come into action and what's really there so that he can legitimately claim that, I did my best on this and if we're gonna do more, we have to go through Congress. There are a lot of things you can accomplish with executive actions and there's a lot that requires congressional approval. I think that, that as far as the economy is concerned, Trump really has to balance policies that will boost the supply side of the economy with the ones that would drive the demand side. so tax reform would bolster consumer spending. It would put more financial, more money into the economy.

But we're growing, we've been growing close to 3 % for the last two years. The unemployment rate is at a level that's considered to be full employment. There's not a whole lot of capacity to grow. But if you cut regulations and Trump cut a lot of regulation in his first go round.

Then that enables the supply side of the economy to grow. Manufacturing, actually is not, the whole industrial side of our economy is not operating at capacity. They're well below capacity. It's been weak the last couple of years. So if cutting regulation allows manufacturing activity to pick back up, that's a part of the economy where the supply side can grow without exerting a whole lot of inflationary pressures on the economy. And then when it comes to energy, I wince sometimes because we've got this AI boom and everybody says, we're going to need all these small modular reactors. And they may not take as long as a conventional nuclear power plant to build, but they take a long time. I mean, this is not something that we're going to see in Trump's term. So if we go full bore into small modular reactors, we're talking five or six years if everything goes right. I happen to believe and we've heard a little bit about this recently.

We will see some nuclear power projects, conventional nuclear power projects be restarted. There was a project that got, I don't even know if it got a quarter of the way done in South Carolina and it essentially bankrupted the utility there. I can see that coming back online. I've toured Plant Vogtle and met with Southern Company and while it's not their number one idea and Plant Vogtle came in at about \$30 billion, which was about three times what it was expected to be. When I talked with the engineers there, they said, you know, Mark, the funny thing about that is if you straight line construction contests, construction costs from 1987 to date, you get about \$30 billion. And he said, but the other thing about it is that that first reactor cost a lot more the second one didn't. They've learned a lot.

I think that they're onto something. I really do think that we're going to see conventional nuclear power, but again, that's eight to 10 years down the road. So what we're really going to see is more of what we have been seeing, which is natural gas and maybe some improvement in pipelines. And by declaring a national energy emergency, which the president can do, mean, given what's gone on with Russia and Ukraine in particular, you can legitimately say we have a national energy emergency. I think there can be a lot done in pipelines and liquid natural gas facilities. And so I think that we could see an awful lot happen there without really having to go through Congress. I think all of this could be done through executive action. And the regulatory agencies themselves are administrative functions. It's not something that Congress has to do anything to approve. So there's the potential for a lot to happen there.

My big concern is I don't know that it's gonna happen anywhere near as quickly as people think.

And because of that, I think that a lot of the resources that we have in place today are going to become more valuable. And that includes what's a little bit out of disfavor right now, which is green energy. Because there are a lot of green energies. There's a lot of wind farms and solar farms that are already operating and they're already there. Their capital's already been sunk. And I think we're going to need all of that power too.

Nando Gomez: Yeah, I would just piggyback on Mark's comments here. You know and I'll give the political time frame and it's kind of maybe stating the obvious to those that follow Washington, D.C. You know, it's not lost on the White House and President Trump and Republicans that control both houses. They have a two year window and they're playing it like they have to get everything done on their policy agenda as quickly as possible within the next two years.

And I would even say it's a shorter than that because usually they have to start gearing up for their next election in the midterm. So there is a strong, strong emphasis to get as much done as possible. Then going back to Mark's point, administratively and as quickly as possible that would maybe hopefully pass court legal muster and just get it done.

And so that we are in somewhat uncharted territory for a guy who's been here for about 20 years and seeing just the level activity that's coming out of this administration and which I think net positive for the energy our energy serving firms, especially the natural gas and as Mark alluded to nuclear. But it's gonna be interesting how this all plays out in how this is going to affect the market. Right. And I think there's a sense here and I've told our folks, some of our firms, but other than my colleagues in the energy sector, is like you're going to have to pace yourself on what you could be able to deliver to on behalf of what's going to be put forth on the policy front.

And in turn, it's going to be interesting if President Trump, under this national energy designation, is gonna pressure those companies to say, you're not drilling the ANWR in Alaska. You should. Let's do it and you should do it now. And so, it's gonna be a push and pull here that we've never seen in, I don't know, in the last time they've seen this before. It's gonna be an interesting time.

And obviously we're going to be very busy here in Washington in trying to navigate through all this.

Derek L. Clyburn: You know, to piggyback on Nando's point this is going to be a very exciting time for the engineering industry. Know, as Nando mentioned before with tax reform, you we were very fortunate with ACEC's leadership to really get some good benefits for pass-through corporations back in 2017. So that, know, protecting those tax reform that our industry benefited from is going to be major focus this year as those tax reforms and that policy expires at the end of 2025.

So getting that done, getting the fix with R &D, tax credit matter is going to be huge this year, which is all great for our industry. But more importantly, know, when Mark was mentioning how long it takes to get these conventional nuclear projects back up and running. You that has a long timeframe, but that's great for the business of engineering because all of that starts with engineering. So that is an amazing and grand opportunity for the engineering industry to really

deliver. You know, when you're talking about being a catalyst for development and catalyst for moving the country and the economy forward, we're right there at the beginning. And Mark, do, I would be remiss being originally from South Carolina.

I follow those energy projects really close and I know that you're aware that that that utility provider just this week Signaled that they will be receiving proposals to Finish that project that was there and it's going to deliver an incredible amount of megawatts But one thing I do want to stay on behalf of the industry what I'm seeing is there is a huge Huge appetite for these small modular reactors that that mark mentioned AI is not going away. It's going to be even more relevant in the future.

And a lot of data centers, mega data centers are bringing these small marginal reactors with them. So again, with engineering industry, as Nando mentioned, there's a lot of firms across the country that specialize in the energy space. There's gonna be so much opportunity for our work to be done. Because when you think about a five year window bringing something from conception to operation, engineering firms, engineering services, everything from civil, geotechnical to mechanical, electrical will be involved to get all those designs done to understand how to do that in a responsible and sustainable way with the new regulations that we're looking forward to being cut so that things can be done in a responsible manner, which is what the engineering industry does. We're really excited about the opportunities that will unfold with this designation of the National Energy Crisis.

Peter Nabhan: Yeah, I appreciate you. I appreciate you sharing that Derek as well that ties into what Mark and Nando were mentioning from their world and how it finds congruence with the AEC industry. And I do hear the term modular reactor.

Derek, do you have an idea how those work? maybe not, though.

Nando Gomez: I'm not an engineer like Derek, so all I know is it's a technology that I'm told that you can basically utilize, create nuclear energy as small as a tractor trailer that you can have on site that would be able to be your power generation on site or at least site adjacent. So don't know. Beyond that that's the perfect example that was given to a liberal arts major like myself That how an SMR would work that it can be like attract a trailer that you'd be on site or near site That could maybe will be utilized to power now.

There's a lot of things that come in between that that maybe Derek and others can give a little bit more But it is certainly a growing technology. Obviously, it's something that you'll eyes and this one is explained to me by a Navy officer He's like look we've been having SMRs, technically, which are small modular reactors in subs for decades. So we have technology there that's been around for decades. We're just customizing it for other end users. So anyway, that's the way it was explained to me. please take a whack at it because that is something that I think maybe needs a little further explanation.

Mark Vitner: I was reluctant to jump in there on an engineering podcast and say what a small modular reactor is. But I think one of the keys to it is that it's safe, it's self-contained, it doesn't produce waste. At least that's my understanding. And they're also scalable, so that while they produce a tiny fraction of what a conventional nuclear reactor would produce, you can just line them up one right after another.

You can bring as much power as you would need to a location. because you can bring them to location, you don't lose all that energy that you would lose a lot of energy transmitting it to the site. So if you were to build a big data center farm and put a small modular reactor or a set of modular reactors there, it'd be very efficient to distribute power there. That's my understanding of it, how the mechanics work is way beyond economics.

Derek L. Clyburn: Just to amplify that, those guys explained it quite nicely in a very simple way. They're a quarter to maybe a tenth of the size of a typical conventional nuclear facility, absolutely scalable, that can be customized, as Mark mentioned, for the end user. A lot of universities are starting to make application and consider utilizing those to power their R & D facilities. And some of their campuses are getting away from the traditional power sources. And more importantly, the data centers, you know, when you have 24-7 reliability requirements for power and energy, that's one of the biggest drivers of decision makers for site selection consultants. Whatever new industry is looking at locating a new facility.

You know, as Mark mentioned about manufacturing and getting a jumpstart, you know, reshoring manufacturing, that takes a lot of energy, that takes a lot of resources to do that. And these SMRs, again, small footprint that can be scaled and your energy becomes more reliable for your operation.

And this new technology, again, remember firms that we have here in ACEC are those firms that are that are helping drive that that innovation for these things.

Nando Gomez: Just to pick again, I'm just wondering, like, I got to highlight one of the priorities and you're going when they initially asked that question, Peter. One of the energy priorities that we have within ACEC was the passage of the advance act, which is was bipartisan legislation that help facilitate, amongst other things, SMR technology, small-mounted reactor technology and providing more licensing reform within the National Regulatory Commission, which is the federal commission that oversees nuclear sites overall. We were very active in that, working with other industry stakeholders to get that bill passed last Congress.

So there's momentum now to pass and see what's next when it comes to nuclear promoting nuclear energy via policy. So I'm going to make a shout out that we ACEC recognize that. So we were bringing stakeholders together.

We're having a seminar soon. So I don't know if we'll be done by the time this is aired. But next Tuesday, we February 28th, we have stakeholders from Holtek, TerraPower and then NEA, which is NEI, the nuclear industry trade group to talk about power, about nuclear energy in the future. So, we recognize that within ACEC. So one of our things besides advocating is education.

And so one of the things we do is try to bring those players in those particular fields like nuclear to talk about what what they're doing in the marketplace and what policies may be helpful for. So that's just to give you an example where we recognize the importance of this particular issue and what we try to do to bring the players in that market together to talk about it for our members overall. And it'll be available by recording. We'll share that with y'all once it's done and be available for recording for ACEC members.

Derek L. Clyburn: Yeah, just to put a plug on that amplify Nando's point there, you know, not no definitely pop my hand if I'm speaking out of turn, but the energy committee is an open committee. So this is an opportunity for for you all out there listening to get involved to participate to get educated so that you were all citizen lobbyists. We're all here trying to make our industry stronger and better by articulating what's important with regards to policy, whether it's tax talking to your senator or your US representative about the importance of why they need to get this tax reform deal done and is important. And of course, any energy policy.

And we all know infrastructure always is critical for our industry as well. So just wanted to make sure that Nando, I'll put a plug in for the energy committee.

Peter Nabhan: Mark, I want to ask you a question on that topic where you said initially that the economy doesn't have necessarily a lot of room to grow because where unemployment is fairly low, our GDP has grown about what, 3 % over the last few years. Which sector do you feel like this energy push might take away from?

Mark Vitner: Well, it, it's probably going to take away, where we're going to see some resources that are going to get freed up is that the Inflation Reduction Act and all this construction of EV plants. There's still an awful lot of construction going on, but that's beginning to slow down. And we're seeing fewer new projects going into the pipeline that are being completed. So I think some of the strengths will come out. Some of the growth in the power industry is going to come use some of the resources that are freed up by fewer EV plants being built. That's one place that we would get some capacity. All of this construction that we've had though from the CHIPS Act and I guess the CHIPS Act as well, that CHIPS Act's also winding down a little bit.

But all this construction that we've had from the Inflation Reduction Act and the CHIPS Act and infrastructure, which that's one part of the construction pipeline that's really just getting started. And I tell people, I remind people all the time that we are still working on shovel-ready projects from Obama's first year in office. So he's been gone a long time. And in Charlotte, NC, we're working on a billion dollar project, rail project in uptown Charlotte that was a shovel-ready project.

Still got a long way to go, not going to be finished till 2027, I believe, so it's a long way to go. So infrastructure, we've got a lot going there, but it's going to be tough. We're short on a lot of resources in construction. And the whole era of question about immigration reform and tightening the border when you look at in the construction trades, most construction trades have at least 25 % of the workers are foreign born. Doesn't mean that they're immigrants.

They may have been born there a long time ago, but still it's 25%. It's an awful lot of folks and it gets up to almost two thirds in some of the trades. what we've seen in the last year or so, we just got the population numbers and we had the strongest population growth in 2024, which measures July 2023 to July 2024. We added like 3.3 million people. 84 % of them came from overseas. was international immigration. So they came from outside the US.

What we saw in the five or six months leading up to the presidential election was progressively less immigration. And with that, we've seen that job openings have begun to increase again. So,

you know, that's one thing that concerns me is will we have the people that we need to enable construction to grow? Because construction is an interesting business.

The median age is fairly up there. It's above the US median age. Most of your heavy construction workers are in their 50s since you have a lot of people that are exiting the field every year. so the replacement need is very, very great. But I'm happy to see it because I'm happy to see all the energy that we're replacing.

I always try to balance things when I talk to groups and I say, you know, my biggest fear on this EV push is that we may be over-investing in today's technology and there may be something down the road and then we're going to have facilities that aren't prepared to produce what we need to produce five or six years from now. I don't like to mess with the free market. I really don't like to mess with the free market.

In the case of the energy investment, we've been restraining investment in that way. Then we would have had more investment if we didn't have all of the obstacles that were put up in the last few years. We would have had more investment in energy.

Nando Gomez: Yeah, if I can just chime in and add real quick about that.

I think there's that sense of reality is hitting some members of Congress, saying, you know, I need I'm growing leaps and bounds. I need energy in my district and state needs of energy. We need a diverse energy portfolio. So I think that's what's going forward. And by the way, I need to figure out how I can support permanent reform because we need to get these projects online as quickly as possible.

That's certainly part of the mix I would just say just good go back and on what some of the issues in the headwinds and this This is this tweet because I've been dealing with it the last 24 hours with some of our membership with ACEC and Mark touched about it on the renewable space offshore wind and wind power when it comes to energy sources and growing energy sources, there's gotta be a recognition that it and it has always been the mantra within ACEC is all the above, it's truly all the above. And we'll see how this plays out, certainly in the next few years.

Jad Sobh: That's great stuff, guys. And just, you know, taking a look, obviously Mark, you had kind of talked about it just momentarily ago about keeping an eye on the future, but also at the same time, looking a little bit further down the road, maybe. And Derek, I'm to throw this one to you first, because obviously being a marketer here at ECS, I kind of see some of the awesome things that we're doing to position ourselves for that future. You know, Derek, in your professional expertise here, what steps do you think AEC firms should be taking to kind of position themselves and even just the industry as a whole to position ourselves as leaders in these evolving landscapes?

Derek L. Clyburn: First, it's about having your voice heard. It's about being involved. That's key. So another plug for Fernando and ACEC is getting involved in the conversation. As an industry,

we solve complex problems all the time. So we are complex problem solvers. But we don't say that out loud. So that's number one, we really need to articulate the value that we bring to the marketplace. That's the key thing there. But another thing is really understanding where the opportunities are going to go. know, Mark really framed this up in a great way. Mark is amazing, by the way, if you haven't figured that out. You know, looking at what's next, looking at AI, looking at how our industry, you know, our industry is transforming and ACEC through the research institute is doing some amazing work with regards to the firm of the future.

I encourage you all to take a look at that. It's really great for the young engineers out there and people that are looking at how to future future future prove your business. You know, what will be the role in AI? How will AI be used? So there's a lot of great work to be done to really not be afraid to embrace the new technologies in AI. It's not going away.

So what I was saying about what can firms do to prepare themselves for the future, you know, as you're getting educated and ACEC does a great job providing good education on future technologies look at adjacent industries that have the same types of regulations, the same types of licensure requirements. When you're looking at the healthcare space, they have a lot going on.

With regards to standard of care and different types of security issues. That's my take.

Jad Sobh: Nando, Mark, want to hop in on that?

Mark Vitner: Yeah, I think that in terms of trying to figure out where all this is going, it is, I'm a big user of AI because I'm a one man shop right now. I don't have a team of analysts like I used to. And every day I find something new that I can use an AI application to help me with. And it's just scratching the surface. it truly is, a lot of things get hyped a lot.

The best comparison that I can make is this is like we were in the early days of the internet when Netscape came out. And suddenly all sorts of applications, things that we never thought would have been possible became possible. industries got disrupted. We don't have travel agents like we used to. mean, the airlines don't have ticket offices. I mean, that's all done online for the most part. there are a lot of industries that are going to get disrupted.

When I think about the energy revolution, which is another big revolution.

There's one company, New Scale Power, which is a small modular reactor maker and designer and the company that one of their investors is Newcore, which is the nation's largest steel manufacturer. And they make steel primarily by using an electric arc furnace. And so they are a big consumer of electricity. It's interesting that Newcore is investing in New Scale because Newcore used to be known as the Clear Corporation of America before they got into steelmaking. So it's kind of a round trip for them. But there's an awful lot going on. It is truly going to be game changing.

I'm looking forward to it. And I'm well aware that not every innovation that we saw in the internet era was great. And one of the concerns I have, but it's so far out there that I don't lose any sleep about it right now, is remember we supposedly had a hundred years of fiber optic

cable laid in the ground when the internet bubble burst. of course then something like Netflix comes along and says, well, I can use that. I can use that fiber.

So I'm certain that at some point we're going to get our head up ourselves with the AI, but it's tiny when you compare it to what it's going to mean to the changes to our economy.

Derek L. Clyburn: And when you're talking about changes, I just want to jump in one more time, Mark mentioned earlier that, you know, population growth added about 3.3 million people. Of those 3.3 million people, if you think down the line, there is a shortage of engineers in this country.

Derek L. Clyburn: That's a fact, right? And we're not producing as many people before. So, ACEC is doing a lot of work, through the workforce consortium, looking at ways to get more people into engineering, you know, really focusing on STEM, making the E in STEM, a large bold E versus a silent E. so when you look at, you know, getting more engineers into this space, looking at retaining engineers in this space, that's going to be a journey, but engineering firms, can utilize and embrace AI and look at how it can be utilized in an appropriate way to solve some of those workforce gaps.

So but that has to all be well thought out. It has to be embraced. It has to be to be tested. And there's a lot of other industries that are doing I know, keep going back to the medical industry, but there are some service industries, I know, as Mark mentioned, that are out there that are testing the use of AI to help solve the workforce gap. So again, that's another one of those things, Jad, that I feel that our industry really needs to get ahead of and really needs to think about because the world talent may cool off a little bit, but it's only going to get worse as you know the speed of commerce continues to to increase.

Jad Sobh: Right and we get some, like I said, going back to being here at ECS as a marketer, we get so many like, hey, we gotta recruit, recruit, recruit and we're trying to do everything we can to get as many people that are great at what they can do in the door to help us out, for sure.

Derek L. Clyburn: We strive on creating an opportunity for people. We look for the best people, we incentivize our people. People who are considering incoming engineering is, it's a way that you can make an impact on society. It's a way you can make an impact on the communities in which you live and work. Engineering is cool. I mean, it's really cool to be able to send people to space, to be able to provide clean drinking water, energy, power, clean air, all that's done through engineering. So, you know and I just want to give another hat tip Nando to Jeff Urban, Chuck and his group and what they've been doing with the engineering and public works roadshow to really highlight some of the great work that our industry is doing just to impact society and bringing some amazing projects to life. mean, I just think of one in the economic development space.

There was in Phoenix last February, it was a large semiconductor facility in which it was featured

with one of the member firms that designed that plant brought all the utilities to it in less than 18 months. It was incredible, incredible feat of engineering. All the work was in the ground and nobody gets to see that. But without the work of those firms, doing the work that we do, that plant never would have located in Phoenix and it was never been able to come online as fast as it did. So I just wanted to kind of amplify the whole notion of getting the best and brightest people into our industry, bringing them in.

Peter Nabhan: We wanted to amplify the voice of the industry because we know it's not particularly an industry that gets coverage like the tech industry where everybody wants to go work there. And I know from a lot of my friends, the end of this industry lost them. started together. They went and worked for a tech company a few years in. very grateful that both you Nando and the ACEC are all working towards that. So thank you.

Derek L. Clyburn: I just have a question for Mark, Peter, if you don't mind, you know, I can't have an economist on this podcast without asking a monetary policy question. You know, that's the big question. know, what do you think the FMOOC is going to do? And, you know, I know long-term rates are still being a little stale in their movement. What are your thoughts there with the backdrop of the new administration?

Mark Vitner: Well, the inflation numbers have been hard to read because when we talk about inflation, we used to talk about the headline CPI and then we would talk about the core where you excluded food and energy prices. And the reason that we broke it out that way is that if it didn't rain and food prices went up because we had a drought, there's nothing the Fed could do about that. Or if OPEC shut off the spigot, we didn't get any oil and the price of went up.

There's nothing monetary policy could do about that. so food and energy prices are more volatile. The core gives you a better idea of where inflation is headed. But with the pandemic, one of the things that happened was prices of a lot of things went up. Electric panels, cars, used cars, they went up. And now that the supply chains have more normalized, they've come down faster and it's made the inflation numbers actually look a little better.

So the core rate of inflation is down to 3.2%. But if you just took all the whole universe of prices that exist out there and looked at how much they went up and how much they came down, inflation's actually closer to 4%. It's coming down, but it's closer to 4%, not the 3.2. And so when people got all bulled up in September, said all the Fed's gonna cut rates and they've cut by a percentage point so far and one was a half point cut and then they did two quarter point cuts, I think they've got two more quarter point cuts. And it could be as soon March it's probably going to be May or June when they do the next one and then they'll probably do it another one next year because monetary policy is actually tight.

And with all of the uncertainty in the economy and uncertainty about what's going to happen with tariffs, what's going to happen with tax reform, when you get more uncertainty, the yield curve tends to steepen and long-term rates tend to go up. And that's what's happened.

And so the Fed realizes that, know, if we keep cutting rates and it raises questions about whether we're putting the cart ahead of the horse because inflation is not coming down, that might actually cause long-term rates to go up even more, creating more uncertainty. It may do more harm than good. And so that's where the Fed is. And the Fed is likely to take their time in cutting interest rates. that's the way that I see it. One of the byproducts of that is that the housing industry is likely to remain relatively slow.

Which is unfortunate because we're under built. We need to build more houses. It's largely a permitting issue, but.

Housing affordability is at an all-time low or a modern era low where it takes over 25 % of median household income to make the principal and interest payments on a mortgage. That's after you put 20 % down and too few people can actually do that with the prices up as much as they are. So I think the federal cut rates a little bit this year, but not a whole lot.

Nando Gomez: It's interesting how this is all going to play out in terms of policy. and maybe bring it back to AI and connection with that and everything's going to go forward with it. it's an interesting dynamic. would say Trump is continuing to disrupt as we go forward the political dynamics on this. So we'll see.

Mark Vitner: I think it has the potential to do a lot of good because you've got people who talk about policy intermingling with people who actually have to live with those policies and they can explain what that actually is going to mean to them in real time. I would like to get back to a world where we celebrate success and that we reach for those big engineering challenges.

Nando Gomez: Let me just close in because somebody who's been around DC for a little bit, churn is good, meaning change is good, right? I think in U.S. government and politics, you need a little, you know, new blood, so to speak, I guess you can say, right? Now, I'm not, this is not a, by no means I'm getting in trouble saying that means lobbyists like me should, are now out of place and you have direct lobbying by the business community. But I would just say, it is refreshing to see some of the faces that are coming in to provide as Mark, you mentioned that expertise, right?

And so this is kind of another way, Derek, to go back on your service in the political action committee and then maybe getting Peter involved and getting direct engagement, right? I just want to facilitate that and have you all in the room and have that conversation with these key policymakers from President Trump to Senator.

Bethune from the Mincini majority leader those are the things that they want to hear from directly from those experts quote unquote and i i agree with you mark i think there's going to be tremendous opportunity and i would say as somebody who's been around the block on the government affairs lobby world nobody's anti-engineer when it comes to engineering, there's a lot of political capital that we bring to the table, you guys bring us to the table. So I think there's

ways we can figure out how we can maximize that, especially with this new administration in Congress.

Jad Sobh: Absolutely. Gentlemen, we'll go ahead and start wrapping up just to touch. So I just want to say a quick thank you for me. You know, I love sitting in on conversations like this it's awesome being able to bring guests like yourselves on here to help, you know, explain all these complex topics and boil them down for our listeners. So I really do appreciate all you coming on today.

Nando Gomez: My pleasure, absolutely.

Mark Vitner: Glad to do it.

Derek L. Clyburn: Yeah, Mark, Nando, thank you again for joining us here on the ECS podcast. You as Peter said, our goal here is to amplify the voice of the engineer and for all the listeners out there. Again, here's a plug. Get involved. There's a way for you all to have your voices heard to make an impact and always remember their strength in numbers.

Peter Nabhan: Indeed, there is. All right, so It's a great way for us to start the year, Mark, Nando and Derek. Thank you so much for joining. Don't forget to stay tuned for more thought-provoking discussions with thought leaders from the industry and please subscribe to our podcast on Apple podcast Spotify or wherever you get your podcast. Thank you again for listening to Groundbreaking, where consulting meets innovation.

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