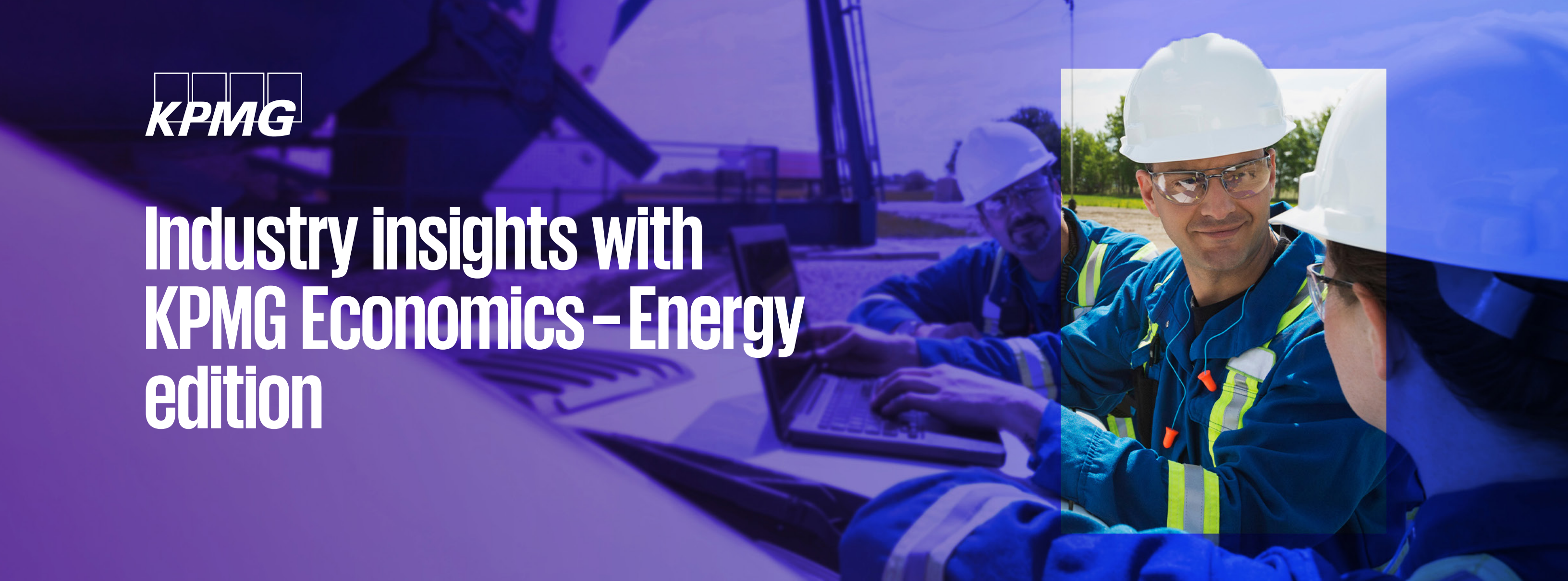

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Industry insights with KPMG Economics – Energy edition

Hello: Welcome to Industry insights with KPMG Economics – Energy edition. Industry Insights with KPMG Economics is series featuring chief economist Diane Swonk, who will be exchanging ideas with the national sector leaders here at KPMG.

In this edition, Diane compares notes with Angie Gildea, National Sector Leader for Energy, Natural Resources and Chemicals. They talk about global issues facing the energy sector, such as availability of talent, supply chain issues and the impact of ESG and climate risk. And most importantly what are the opportunities facing the sector – and there are many. So let's get started….

Angie Gildea: Diane, one constant theme that I'm hearing from both my clients and my colleagues is this topic around labor. I know you're a labor economist, so can you help us understand what is going on?

Diane Swonk: Well it's a little bit crazy right now, right? We've got an incredible labor demand. Still, even though the economy has seen a lot of rate hikes, and the Fed's been trying to cool the economy with a constrained labor supply. And, you know, the labor force growth since February of 2020 has only been 0.8% in 3 years. That's after growing at a 1% rate during much of the 2010's. So that's a major slowdown. We're missing over 3.6 million workers that should have been in the workforce if we had gone on the trajectory, we were on in the 2010, and part of that the biggest part is retirement by older baby boomers, who are not coming back between 1995, and February, 2020.

We saw the over 65 crowd increasing their participation in the labor market consistently until February 2020 They hit a wall dropped out, and they had not come back everything from the risk of contagion to the wealth effects tied to the surge in home values.

And Long Covid has sidelined many people who were once, participating as they were older in life. That's over 2 million of those missed workers alone. On top of it we have a shortfall in immigration. There's beginning to see a catch up in legal immigration from the period 2017 to 2019.

But we really came to almost standstill in 2020 and 2021, so that's a long way to go in terms of catching up. And we just don't have as many workers to replace those who are leaving. And then, of course, there were the souls we lost to Covid itself. Everything from long Covid, reducing some of the ability of some people to work as much as they once could to the fact that you know we actually cut into our labor force because several 100,000 workers were in that prime age group of sort of 25- to 54-year-olds that you have in the labor force. So, you put it all together, and it's not surprising that supply is constrained. But then you match that against what is continued strain in job demand. Job openings in December were about 60% above the pace we saw in February 2020, and even though they've come off of the hot pace by more high frequency data that we see by the job postings, by the individual companies that actually post jobs less electronically now.

They're still running much, much higher than they were in February, 2020. So, the collision of those 2 things together has meant that we're really missing a lot of workers. I think another layer of this as well is the pivot to working from home, but also school online really affected the labor market.

Not only did it diminish educational attainment. It was different by different race, different socio-economic status, but also by gender. Women weathered the pivot online better than men and women were already out attaining men before the pandemic in the millennial generation. And now we're seeing that that's been compounded and accelerated by the pandemic. So, when people say they're looking for skills, not only is it a shortage of actual people we've actually diminished the amount of training and education that people have gotten.

There's no magic wand that can be what you know sort of waved to rectify the problem that we don't have a lot of kids in vocational training, and we need to really see a major shift in the education system. But again, real estate revenues at the local level pay for that.

Angie Gildea: Well, you are hitting on some key issues that we are certainly feeling in the energy sector. The retirement and that increased of knowledge and skill sets we've lost, particularly in the engineering disciplines. We've been challenged from a trade's perspective, from welders and pipe fitters and utility linemen who men make a large portion of those of those jobs. So, we're seeing it in in all kinds of ways. And it's certainly impacting us in the energy sector because we're seeing increases unfortunately, in safety incidences. You don't have that skilled workforce out there that really know some of the challenges of working in these tough environments. And then we're also seeing it from a major capital projects standpoint, just being able to complete the projects on time and over budget. So, we're definitely feeling it here in the energy sector as well. What about the global supply chain? I know that's something that's slowly been coming back after wreaking a lot of havoc on businesses. What are you and your fellow economists seeing especially in places like China and elsewhere in Asia?

Diane Swonk: Well, the good news, of course, is that China is finally reopening, and we saw we're seeing their production come back a bit, and that is important. But for the moment at least, some of the supply chain bottle necks are beginning to ease, and that's the good news. As China further reopens, that will help to ease some of those pressures. We're also seeing a reshuffling of supply chains globally. We see a lot of movement towards places like Mexico, where we have in place the USMCA. We had trade, you know, agreements in place to protect intellectual property, and ensure that we can continue to import from something so close by as Mexico. So, a lot of friends shoring is starting to happen in Mexico. We're also seeing the reshuffling within Asia. There's a move towards Vietnam, although that's dominated by Chinese companies, but also move towards the Philippines. The Philippines is one of the faster growing economies next to India, which is the fastest growing economy in the world.

I think the other issues. It's going to become very important in supply chains. And what we're still struggling with is the infrastructure spending that's ramping up in the United States. Not only is that further compromising the workers that are available in the sector, in the energy sector for either renewable energies, engineers, all of the things that we have going on, and also in that in for carbon fuels.

But we also are seeing, you know, material costs go back up again, because infrastructure bill that we desperately need. We need to fix our infrastructure. But it's all happening at once, and the timing couldn't be worse from the perspective of the Federal Reserve given, we're already in an inflationary environment that's not cold enough for them to ease up on monetary policy and lower rates instead of raise rates further.

Angie Gildea: Yeah, we certainly see some of the supply chain challenges still here in the energy sector. The good news for us is, if you look at the average rig count in North America, it's up about 47% compared in 2022 versus what it was in 2021, and the international average rig count globally is around 13% increase. So that tells me that drilling's happening, activity is occurring, but globally we still are really impacted by some of the challenges you mentioned, the shortage of labor that we talked about, and some of the increased lead times, and especially in raw materials like steel definitely impacts us, and one of the things that I see on my end is suppliers are being really careful not to over invest in some of the capacity and their equipment like rigs and vessels and sub-sea equipment, just because the futures is uncertain. And so, you see a really tight gap between the supply of those materials and equipment and demand. So, it's still something challenging we're working out as well.

Diane Swonk: You know, Angie, I just wanted to follow up on that one point with you. You know the issue on uncertainty, especially for carbon fuel producers. You know, we want them to ramp up in this environment when yet they know they're being dealt with. We're dealing with the pivot to renewables and the desire to secure energy grids on that front. That delay that you're talking about is showing up in the investment data as well, and it's something that gets really lost in translation, I think, in terms of understanding why we're not seeing more oil production out there, and it's something that I think many people really don't understand – Many, many energy producers want to be energy producers for the long haul, they want to also lean into renewables. But in order to pivot into that, they can't be investing, only in fossil fuels. And I think that's where a real challenge is as well.

Angie Gildea: Yeah, that's right. In the energy sector has these last few years, notwithstanding, has underperformed the S&P 500. So what investors are really pushing these companies to do is return value to their shareholders. So, it makes it really, really challenging to manage, especially with this, the topic around energy transition on the horizon as well.

Well, let me pivot a little bit to the topic of ESG, because that's something that's definitely near and dear to us in the energy sector, both from a decarbonization standpoint as well as helping other companies and industries provide lower and cleaner types of energy fuel. So how do you look at ESG as an economist?

Diane Swonk: First of all, as a labor economist, we know that, unless you only want to have baby boomers as the people who you're going to be recruiting that are now participating in less than the labor force. And they were pre-pandemic. You're going to be out of luck in terms of the talent pool that you can actually attract, and that's because we know that every single age group up to baby boomers, the over 65 crowd in particular, [they value] It's more important to them that not only does their employer look at ESG on all sides of ESG. The environment, social issues governance, but walks the talk, and that gets to be a really hard issue, of course, because we don't still have the metrics. We need to say how compliant we are on ESG.

You really have to lean into these ESG targets and figure out how you can also make sure that you're engaging with your workers, and that they're on board with what you're doing in terms of meeting your ESG parties and aware of it, because otherwise you're not going to be as interested in working for you, and that didn't once matter. Well, now you're competing for talent, and the labor shortages we're facing are more structural than cyclical in nature. There are some real challenges that we should be moving on the margins in terms of participation for both men and women in the United States in particular, because we know that our participation rate in the United States among both groups is the lowest among the G20, which is really only the G19 because it doesn't include Russia anymore. In terms of forecasting. There's been all kinds of efforts to try to involve climatologists to try to do scenarios to try to really think about. What does the increase in the incidence of extreme weather events, even if we were to make somehow magically some of the net zero targets for 2030 or 2050.

We would still have an increase in the number of extreme weather events around the world than we have today, and that increase in incidents of extreme weather. Events is adds to this like shocks that we see, and the fragility we see, and has been revealed by the pandemic in terms of supply chains.

We're looking at a world that's more susceptible to these external shocks that makes it more inflation prone to bouts of booms and bust and interrupted in those business cycles by interest rate hikes much more often rather than interest rate cuts. So, you're talking about a higher cost of capital environment, an environment that you know you really have to hedge a lot more against in terms of your cost side of the equation, because an interruption due to an extreme weather event is much more costly than it was in the past.

The other is, of course, insurance. Mainly on energy companies, and I'll direct this back at you, Angie, you know, how are they dealing with the issues of insurance? [It] is one of the areas that is the most conscious of environmental risk, especially on the ESG front and in terms of financial firms.

Also, whether the fed stress tests them on or not, which they currently do not on environmental standards; but financial institutions are already pulling back from lending into areas of the economy and into regions of the world that are most at risk for extreme climate event. How's your industry, dealing with that.

Angie Gildea: Well Diane you have hit on a number of things that we are dealing with front and center in terms of agendas for our senior executives in the energy sector you mentioned, insurance…companies are finding they can no longer get insurance, so they're having to self insure which that adds a whole, another level of financial risk and resilience that they have to plan for in the event not if but when a severe weather event happens.

That was KPMG's sector leader Angie Gildea and Chief Economist Diane Swonk discussing challenges and opportunities for the Energy, Natural Resources and Chemicals sector. Subscribe to hear Diane's conversations with our other sector leaders from Healthcare and Life Sciences, Technology, and Consumer and Retail.