Paul: As more and more investors and boards elevate the importance given to environmental, social, and corporate governance metrics, greater emphasis is being placed on reporting and transparency. To help ensure investors are able to make informed decisions related to ESG matters, the Task [00:00:30] Force on Climate Related Financial Disclosures, or TCFD, was founded in 2015 as a mechanism to provide standardized reporting methods for organizations to communicate their climate impact data. Hello, I'm your host Paul Teese. To learn more about the TCFD and business climate resilience, I was joined in this episode of If/Win by Adam Little, Jacobs' Director of Corporate Sustainability, and Craig Clifton, Jacobs' Global Technology Leader for Resilience [00:01:00] and Climate Change. In the discussion that follows, Adam and Craig help me to better understand what the TCFD is and what are some types of climate related financial risks, as well as steps that organizations might take to offset those. Adam and Craig, thank you both for joining me today to talk about this important topic about climate resilience and financial disclosures. I've seen more and more companies are being called to [00:01:30] accountability in how they are contributing to the fight for appropriate environmental stewardship. I see this acronym TCFD, and so I wanted to get us started, it's the table stakes is of what we're going to be discussing today. So I'd like to start with Adam. Can you explain for our audience what the, and it's a long name, the Task Force on Climate [00:02:00] Related Financial Disclosures, or the TCFD, what it is and what it strives to achieve? Adam Little: I certainly can, and yeah, it is a bit of a mouthful and there are a lot of acronyms in the climate change and sustainability world. I mean, fundamentally the TCFD, they're a group. They exist really with a purpose to bring consistency and commonality to how businesses understand and disclose financial business risks from [00:02:30] climate change. And with that brings a bit of consistent framework and a bit of order to it. So the recent report and the World Economic

and that, and with that, it will provide a lot of economic opportunities, perhaps on a scale, similar to the industrial revolution, but that's a very complex transition that's required.
[00:03:00] And, and it brings with it risks of social economic, environmental disorder. And the TCFD they have been stood up by the G20 really to bring climate risk reporting into the business mainstream. So they've developed a series of recommendations for more effective disclosures and report to help businesses report consistently, transparently on their financial risks and opportunities, aid decision making, integrate climate risks into enterprise risk management, and strategy across [00:03:30] organizations. So they created a framework that focuses on thematic areas of governance, strategy, risk

management metrics and targets, and it provides businesses with that

Forum will take their own kind of top 10 global risks that are a threat to the global economy, identify that there is a need to transition to a net zero future,

consistent framework to operate within. But it's still a very, a very new area for businesses. There aren't any kind of sets of legislation or regulations that are enforced. They will come in enforce for large businesses in the UK this year, but around the world it's still an area that is emerging [00:04:00] and that businesses are grappling with at the moment.

Paul: That's interesting. Now, is it fair to say, and maybe this is not too far off field, but is it fair to say that we are, or will, see company stock prices and how they perform to some degree will be influenced by the TCFD, and how well or how poorly they manage their environmental stewardship?

Adam Little: [00:04:30] Yes. It might be a bit of a stretch to say that stock prices are impacted directly by company's alignment to the TCFD framework, but it's part of a whole suite of measures that come under the ESG umbrella, then yes, that's part of it. And the TCFD is there to try and steer financial flows towards climate resilient outcomes in the real world. So if businesses start thinking about climate change, as it poses a real [00:05:00] kind of economic risk to business performance, then the way that businesses can mitigate the risks and maximize and act to realize the opportunities they can stem the flow, the financial flows towards climate resilient outcomes in the real world. And that's really one of the objectives of the group.

Paul: Okay, excellent. Now, Craig, what are some examples and types of climate related financial risks?

Craig Clifton: The TCFD talks about two kinds of risk. It breaks them into [00:05:30] two categories. One is the kind of thing that we would typically think about, and they are the physical effects of climate change as it relates to various kinds of natural hazard. And the other is, sort of Adam touched on in his preceding point, was risks associated with the transition to a low carbon economy or society. So when we think about physical impact risks, it's kind of like, the effects of natural hazards, that are exacerbated by climate change. That could be due to flooding, heat waves, wildfire, drought, [00:06:00] sea level rise, storms, a whole range of things, and those financial risks arise because something gets damaged, it's got to be repaired; business activities are interrupted, that leads to a loss of profitability or greater costs or whatever it might be, the value of assets that are damaged, or you know, they might be lost irrecoverably. Businesses may face increased insurance costs. They may have activities that are located in highly sort of hazard exposed areas and may need to shift, and they'll be cost [00:06:30] associated with those.

The transitional risks. Well, these are the risks associated, as the name suggests, with the transition to low carbon. And that may be that markets shift because we are moving away from non-renewable power to renewable power, or from high emissions technologies to lower emissions technologies. The transition will be accompanied by changes in government policy, regulation, legislation and the like, shifts in social trends that affect a business's [00:07:00] reputation or

its social license. And from that financial risks might arise because a company has stranded assets. They may have invested heavily in coal fire power, for example, and as society transitions away from that, if that's where all their eggs are, that involves a financial risk for them. It may result from a loss of markets or a loss of customers because they're moving away from high carbon activities to lower carbon activities. [00:07:30] Risks arise might be because companies invest in a particular kind of technology that actually works out, as we are moving along the transition, that that wasn't a good choice.

It may occur because policy or regulation increases business costs. It creates uncertainty. It may be that companies like Jacobs, which are operating in multiple markets face increased complexity around its decision making because different jurisdictions have different policies, different parts [00:08:00] or progress on the transition and that creates all kind of potential costs for it.

I think the other thing to think about it is this whole story is not just about risk; it's also about opportunities as well. And so both the transition and the physical risks create opportunities. So, in the transition risk, it's about the opportunities around the development or application of low carbon technologies may be that you can attract customers to your business or even staff to business because you've, you've [00:08:30] got integrated and ambitious corporate climate change responses. And even with the physical risk, while for society, generally, they're not too many upsides of the impacts of climate change, but for a business like Jacobs who work with clients to help them build resilience into their business, their systems, their assets, and the like, there are real opportunities coming out of that for us, businesses like ours.

- Paul: Interesting. So kind of what I'm hearing is there's kind of several different types of risk. Maybe there are [00:09:00] risks for the negative impacts that could happen infrastructure could be damaged or the supply chain could be harmed in some way, that sort of thing, but then there's also the risks that are associated with investing in business model changes. Like you articulated, a shifting away from a very carbon heavy type of energy production to one that is much more conducive to a clean environment and that sort of thing. That doesn't just happen overnight, [00:09:30] just flip the switch and you know, all of that, but you actually have to invest the money and the resources to make that happen. So, I'm hearing kind of a multiple characteristic of these financial risks. Some that are positive, investment oriented and some that are like problem mitigation.
- Craig Clifton: Yeah, and climate change, it adds greater complexity to the already complex environment that businesses are operating in. So [00:10:00] they need to be thinking through things in a somewhat different way, in another way, in addition to the ways in which they're thinking through complexity of their business already.

Paul: Oh yeah, absolutely. And given how labyrinthian the supply chains are these days sound a global market, and like, it's just, I'm sure it's just kind of staggering to try to disentangle that.

Adam Little: So just on that about the climate change complexity is that when you're [00:10:30] trying to kind of translate that into business strategy, business planning cycles, which typically follow a kind of three to five year cycle, climate change projections look out much, much, much longer over 20, 30, 50, 70 year timeframes when we're talking about, so the physical impacts of climate change. And when you look at the scenarios that organizations like the IPCC use to project what will likely happen if the world [00:11:00] stays on a current trajectory or the current high emission is trajectory, or it does transition to a low carbon economy and achieve net zero, that's a very different time scale that you have to work with. And you have to then translate that into a much shorter timeframe in order to embed that within a business' Enterprise Risk Management strategy. So it does add that other, that extra level of complexity that we're dealing with as well. It's really important point about what the TCFD is trying to do.

Paul: No, that's a great [00:11:30] point because it really kind of tests, I think in some ways, the organizational strategic fortitude to care, to see it through. Right? And again, it comes to that, as you say, if your budgeting or your investment cycle is three to five years, but you really need to be in the climate change mitigation game, you know, for the long haul, right? Like this it's a 20 year, 30 year journey or whatever it may be. It does test your organizational [00:12:00] fortitude down the road. "Oh yeah. That was, that was a pet project for our past CEO. But our new CEOs focused on this, or we need to, you know, our stock price needs to go north with something or other..."

You know, so it's kind of interesting that you have something like the TCFD and you have these, the street is more and more, like you mentioned earlier, like really focused on ESG matters. So it's going to help drive that positive. It'll incentivize [00:12:30] a sustained effort, I guess is what I would say toward remediation. Now Adam, what are some steps that organizations should consider taking to offset these risks?

Adam Little: Yeah. And, and I think, and, and this kind of then just builds on that last point that you were making in terms of kind of building this into how a business kind of looks at risk across the enterprise. And I think that Craig made the point that risks and opportunities, [00:13:00] certainly for a company like Jacobs, we work across lots of different markets. We're a really diverse organization, whereas a lot of businesses stick within operate within one industry. We are very, we're very different, and so by going through this process, we've identified risks and opportunities from climate change that are material to our organization, but it's really important to understand those risks from multiple perspectives within an industry. And climate change, it will have an impact [00:13:30] across all parts of the global economy; there isn't a single part of the world that will not be in some way.

So, we've taken steps first to align to the TCFD's risk management frameworks, which it's helped us enormously to frame the risks and opportunities, albeit still at quite a high level, but we have looked across our markets, across both lines of businesses and tried to quantify that in some way. So firstly, that's the first step that I think businesses should try and take [00:14:00] is to try and understand what risks and opportunities exist within an industry, but that are material to their organization. There will also be non climate related drivers that will impact on each of those risks, as well. But how a particular climate related risk will impact on different stakeholders within an industry, and then what follows is what action you can take. It will vary from business to business, industry to industry, region to region. So the step that we are now looking at this year is how we can then build [00:14:30] climate risk management through mitigation adaptation strategies into each our market strategy.

But taking that first step of understanding in terms of how climate change will impact your business operations, it can be really complicated, pretty daunting;how do you go about it? You know, the TCFD provide guidelines. They provide a framework; they do not provide a checklist that you can follow line by line and it will spit a [00:15:00] result out at the end. Because it's different. Each business has to kind of take the framework, take the guidelines and make it their own. But I think that one step that business can take is, is framing how climate change will impact you, your customers, your suppliers, your communities, the region that you work in, and then start to think about how can you adapt and mitigate.

So through mitigation activities, we talk about decarbonizing your business. Look at measuring your carbon impact, setting carbon [00:15:30] reduction, target, putting simple implementation measures in place, monitoring progress. Adaptation is changing, is adapting to the change that will likely come, either to mitigate risks or capitalize on those opportunities. And that can be done through a kind of a similar sort of planning cycle, but it's taking that first step to really kind of think about climate change and put boundaries around the assessment to make it manageable, but it has to be relevant to your business operations and think about [00:16:00] how climate change will impact upon your operations and your resilience and your resilience to success.

Paul: That's interesting. And I think it's like in a way it's of, it's an incentive to like get into your business and really understand your business, and really take a sharp look at it strategically. Because with something like this, and if we read the tea leaves, I mean, you can see that regulators are going to [00:16:30] more and more be like, they're going to be on top of companies to make sure that there's some compliance. Investors are going to demand it. Customers are going to demand it. There is a number of parties at play that any enterprise. prepare.

Adam Little: Absolutely. Paul: Yeah. It's going to happen... it's like, well, you can't ignore it. Now Craig, kind of building on what at Adam was saying, can you speak to the concept of business resilience? Especially in the context of climate risks? Craig Clifton: [00:17:00] When I think about resilience, I think about, well, what are we to be resilient to? And, and when we think about that, we think about the effects of disruptive trends and events. If you think about that from a climate perspective, the kinds of trends are the physical impacts that we talked about before: sea levels are rising, the atmosphere is warming, the climate in, in some locations where I am in Australia, parts of Australia, it's drying, water security is declining, seas [00:17:30] are acidifying and that's having an effect on marine food webs, a whole range of potential physical. The trends also refer to the low carbon transition. Risks associated with changing markets, technology, regulations, social license, and the like. And it also includes resilience to extreme events: storms, wildfire, floods, and the like. So resilient businesses are able, kind of a

They look ahead, they have thought about what may [00:18:00] lie head for them, and they are prepared for the challenges that may emerge. And that could be higher sea levels, floods, water insecurity.; it could be some of those government regulation change, the change in the electricity grid that the need to decarbonize. And so they think about, they anticipate what might change, they prepare, and they prepare in a risk based way. So they are thinking about, well, what's, what's the consequence for our business of this? How likely is it to occur? And so, when allocating their resources [00:18:30] and energy and effort, they think about, well, what are the things that pose the greatest risk? Well, conversely, what are the things that create the greatest opportunity for us? Because resilience is not just about managing the adverse outcomes, it is also positioning for the opportunities that emerge too.

bit what Adam was talking about before, they are able to anticipate and

So resilient businesses, they anticipate and prepare, but they are also able to resist things that are adverse conditions for a period of time. Because they have been prepared, they have created diversity in their supply chain. So if one market is [00:19:00] affected by, a high, a cyclone or a hurricane that's exacerbated by climate change, they've got another source for their products. If they are located in a particular location. It's for example, infrastructure, that's sensitive to flooding, like pump stations on a sewage system, they have lifted those up above the flood levels. They have worked to decarbonize their business, and so they can avoid costs or, or market pressures that are associated with higher emissions. So they are able to sort [00:19:30] of resist and work with those changes. And then when some kind of adverse effect occurs, their planning has influenced their capacity to recover, so they can recover quickly. They've thought about what they need to do to get the business operating back again quickly.

And a resilient business is also one that learns. And so if disruptions occur, people think about, well, why did that happen? Why, how can we position ourselves better in future? So that those things don't occur as well. And so, [00:20:00] I guess that speaks to concept of resilience. So, anticipating and preparing, resisting, recovering, learning, and really, making sure that the business is also, as I said, set up to position for the opportunities that may emerge from these kinds of changes that we're talking about.

Paul: Mm. I like that. And I like the, to kind of hone in on the learning aspect, particularly in relation to Jacobs in the next couple of questions I have are for both of you, and it's regarding Jacobs, [00:20:30] what Jacobs is doing first and for itself, but then also for its clients. And I like it in the context of learning because Jacobs is such a varied, as Adam said, it's a varied business. It's involved in so many different sectors, so many facets of society. And so I imagine there's just so many learnings that are transpiring across the enterprise. And so, so my first question here [00:21:00] for both of you, and I'll start with Adam, and then I will bring it back to Craig and ask Craig to weigh in on it as well. So, Adam, the question is when it comes to climate related financial risks and our climate response in general, what is Jacobs doing in regards to its own operations?

Adam Little: It's probably too many to mention on this recording, but the biggest change we have seen, which is quite a recent change just happened late last year. We established a central office of global [00:21:30] climate response, an ESG, which has a reporting line into our President and Chief Operating Officer, Bob Pragada. The office is there to act as a connecting point for our go to market solutions, which will really drive the ethos that every project we deliver can now become a climate response opportunity to accelerate things like the energy transition, decarbonization, climate adaptation and resilience, natural resource stewardship. It might take a little bit of thinking. It might take a little bit of [00:22:00] reassessment of how we deliver that project or how we engage the client in opening on middle game sales pursuits, but the opportunity is there to make every project that climate response opportunity.

And like we have been discussing around the TCFD. I see this as a huge platform to drive and us to kind of frame market opportunities across our business. So we have taken those steps to map out our own climate related financial risks. And yes, it is still at a high level, but as we get deeper [00:22:30] into the nuances of our risks and opportunities across each of our end markets, the assessment, as well as being part of our overall enterprise risk management processes, can serve as that engine for growth and feed into the climate accelerator and serve the purpose of what the office of global climate responses there to do for the business. It's so important to be collaborative and, and work in partnership with our clients to understand how to take effective climate action together. And I think that is part [00:23:00] of it either through just doesn't necessarily need to be just through delivering projects; it could just be picking up a phone, having a conversation, scheduling a workshop, just for learning and knowledge share.

It can be as simple as that in terms of our own operations to kind of limit our climate impact. We've set science based targets. We are in the process of signing up to the new corporate standard for net zero, that has been developed by the science based targets initiative, which will result in much [00:23:30] more ambitious, longer term science based targets for all of our scope one, scope twos scope three emissions. We recently rebranded our travel planning tool, which is now called Go-smart, and that embeds carbon pricing features. So we are currently imposing a carbon price on all non-billable travel, at a rate of \$50 per ton, which generates awareness and education around the need to travel and makes people aware of the impact, the environmental [00:24:00] impact and the financial impact of non-essential travel to encourage people to make more sustainable decisions around how, when, if they travel. The revenue generated by that will go into a ring-fenced carbon reduction fund that we can then use to invest in other market leading opportunities to further decarbonize the industries in which we work.

We have also partnered with the Royal Scottish Geographic Society to produce a climate solutions accelerator course. And that again provides a really accessible [00:24:30] bite-sized video based course that employees can access to raise awareness and education around the basic science of climate change and simple actions that we can take place. So a lot of it is around taking simple steps to decarbonize our own business. A big part of it is raising awareness and educating people around what it is, just on the simple science. Not everyone is aware of the basic science of climate change, and then understanding those risks and opportunities is [00:25:00] a much more complex, broad part of the equation that trickles down into all of our markets to drive those growth opportunities.

- Paul: Excellent. And then Craig, the same question for you, just to piggyback on what Adam was saying. What, when it comes to climate related financial risks and our climate response in general, from your viewpoint, what is Jacobs doing in regards to its operations?
- Craig Clifton: Well, Adam has covered the list pretty well. I think I would focus on a couple [00:25:30] of other additional areas to what he's saying. And I guess one of those is around the use of technology. And, it's really a couple of things, one is developing tools and technology that allow our project teams to think about climate risk on the projects that we deliver. So, not all of the projects that we do at Jacobs have some kind of climate risk associated with them, but most of them do. And so we need our people to be able to access information that can tell them over the life of the project, [00:26:00] what may climate change mean? To challenge them to think about what are the sort of emissions implications of that?

One of the things that we're doing is really helping to provide our teams with access to the kind of information that they can use in that process. So that we are really thinking through the risks associated with each project that we are

doing, that, that are materially exposed. In Jacobs, we have a Solutions in Technology [00:26:30] Network as part of our business model, but we're not expecting everyone in the company to be experts in climate change. And so our solutions in technology sort of aspect of our business allows people to draw into networks where they can actually easily and efficiently access the people that really do have specialist knowledge in this area, so that they can bring that expertise to bear on our projects. Some projects, high level information is adequate; other projects where there is deep [00:27:00] climate risk exposure, a real op opportunity or challenge around decarbonization, we do need to draw the specialists in. Within Jacobs, we have incredible depth of expertise across the full spectrum of climate response.

Paul: Now, to flip the script a little bit and take our view outside of Jacobs, and this, I am going to ask Craig first, and then Adam, I will ask you to add color to it as well. But Craig, what differentiators does Jacobs bring to assist its clients [00:27:30] and their operations and to manage their business risks from climate change?

Craig Clifton: Yeah, I think there are a few and I guess the first one and are we different from others? Perhaps not, but I think integrity is a really important one. Climate response is not just something that we take seriously for our client's business. You know, as Adam talked about, it's something that we're, as Jacobs, are really committed to ourselves, we are committed to addressing our own emissions. We are committed to understanding governing, managing [00:28:00] our own climate financial risks and other kinds of climate risks. So we are interested in being...we know that we're on a journey at Jacobs, we have not got it all right just yet, and we are learning about ways of doing it better. And so we are this is integrity about our approach. We are not saying it's well, it's all about you. It's, about working in partnership, collaborating, as Adam, before with our clients to actually work on solutions together that help us, that help them [00:28:30] and that help the societies in which we're involved.

So I think that integrity is really important. I think it is one of the things that our staff increasingly recognize and value about the company is that we are actually taking this seriously about our own business and how we interact with our clients on that. I think another thing that may differentiate us is integration. And so you think about climate change, it involves, it's deeply embedded in, it's implications are deeply embedded in clients' business. And [00:29:00] so at Jacobs, we bring deep knowledge of our clients' business, the infrastructure that they all operate, the systems or other processes that are going on, we understand their stakeholders, the communities in which they're working, the regulatory environment, and so on.

We apply rigorous, strategic thinking and analysis of climate risks and impacts, low carbon transition to their business. We can collaborate with them, and we do collaborate with them, to plan or design for strengthening [00:29:30] and resilience or decarbonization. We help them bring appropriate technology, that

might be standard off the shelf technology, or we can work with the	m to
innovate where that's appropriate, where the client has the resource	es and that
technology's appropriate to them. And then we can work with them	to deliver
or implement their plans, their designs, their programs. So the oppo	rtunities
there, if it's required to that sort of whole end of end climate respon	se, or
taking individual [00:30:00] parts of it as appropriate to where we're	engaged
with our client. But I think that the capacity to integrate with our clie	ent's
business and help them solve the very complex challenges associate	d with
climate change, I think is a really important feature of Jacobs.	

And I guess the third one that I will touch on and leave it at that is, is sort of the combination of global reach and local relevance. I talked before about our solutions and technology network. That helps people in our offices [00:30:30] distribute it across the various countries in which we're operating draw on key experts specialists across the, the various dimensions of the climate response globally. And so, so with a relatively small number of calls or emails or whatever, they can get in touch with a key specialist in another country or their own, if they didn't know about them.

They can talk to them and they can bring that project locally, and because we've sort of, through COVID, we have pivoted to online working, [00:31:00] people don't need to travel as much. And so the opportunities to bring that expertise into local projects with that expertise interpreted by people who understand the local challenges, local opportunities; I think it's a real advantage for us. Having that so global reach, but that broad network of local offices to interpret and contextualize the great knowledge that we can bring. So I think that there's a few points there. Adam has probably got some others as well.

Paul: Excellent. Well, thank you. And then Adam, so the [00:31:30] question, what differentiators does Jacobs bring to assist its clients and their operations and to manage their business risks from climate change?

Adam Little: Yeah, absolutely. And look, Craig's given a really comprehensive answer there. I think one thing that we, we did touch upon in, in the previous question was around innovation. And how we approach the challenge of solving problems for clients. And we've built up a real capability and a discipline around how we practice innovation [00:32:00] within Jacobs and how we take that out to our clients. And I think that is a success story for the organization. Having that network of facilitators, network of people that understand now how to look at a problem differently, how to kind of reframe it, how to kind of work through, "well, what is that problem?" "What is it that our clients are trying to solve?" And then trying to figure out the best way of identifying a solution that brings value to the client and to us.

I think that is a real differentiator [00:32:30] for Jacobs. I also think our leadership commitment to sustainability and the climate response is another, because without it, you wouldn't have things like the plan beyond strategy, for

example, that is built on a foundation of the sustainable development goals.	
This discussion has been all about climate change and the climate response.	
Now, that is a massive problem in itself to solve, but climate change leads to lo	ots
of other problems around social inequalities, environmental damage around the	he
[00:33:00] world. Climate change underpins all other sustainable development	t
goals, and the fact that we have a company strategy that seeks to address that	t
holistically is a fantastic thing. We would not have done a TCFD assessment,	
would it not been for our leadership commitment to focus on areas around ES	G
climate response sustainability. That in itself is now proving to serve, to be a	
differentiator, and has led to client discussions and requests for support to, to	
do likewise. So that leadership [00:33:30] commitment is a real differentiator	
for us.	

And with that, the acquisitions that have taken place recently. Specifically, PA Consulting. When you are talking about things like TCFD, you start to get into the realm of a more kind of traditional management consulting, depending on the stakeholders that you need to engage across the client organization, to talk at that level. And that's an extra capability that the PA can bring to Jacobs. All of those things kind of brought together are really [00:34:00] wrong differentiators that we can take out to our clients.

Paul: Well, Adam and Craig, I want to thank you both so much for this conversation today. I think it's been very illuminative, and I have learned a lot. And, obviously with something like with the TCFD, it's vitally important to a company's strategic mission. Obviously, I think to just kind of encapsulate Adam, what you were just saying, it seems to, it starts with leadership. For [00:34:30] something like this, it may be a bit of an onerous lift, but to not do it would be far worse. It's just one of those things would just got to get to it and just get it done. So, but I want to thank you both so much for joining me today.

Adam Little: You're welcome. Thank you.