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TRANSCRIPT

The US Infrastructure Deal

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Mike Disabato:

What's up, everyone, and welcome to the weekly edition of ESG Now where we cover how the environment, our society and corporate governance affects and are affected by our economy. I'm your host, Mike Disabato. And this week we have one multi-part story for you. We're going to discuss the massive infrastructure plan that just passed the US Senate and has been billed as an historic deal that boosts clean energy jobs, strengthens resilience, and advances environmental justice. We discuss how it envelopes companies and our economy.

Mike Disabato:

Thanks as always for joining us, stay tuned. COP26 is coming to an end this week. I have a colleague named [Simone Aruez Ver Gote 00:00:45], and she was there for most of it. And next week, we're going to have her on the show and she's going to kind of give her impressions of the high stake negotiations. So make sure you tuned in for that. But first we're going to discuss the one trillion US dollar infrastructure bill that US president Biden is by all measures, going to sign into law on Monday. And it's tooled for a low carbon society.

Mike Disabato:

And why are we talking about this before we talk about COP26? Well that's because no matter what the negotiations that COP26 said, no matter how many pledges were signed, governments are going to have to go home and they are going to have to pass their own set of policies to move those promises from the stratosphere down to more habitable ground. And that's what this US infrastructure deal is trying to do.

Mike Disabato:

It was sold by US president Biden to allow the US, one of the largest polluters by any measure, to reduce its emissions by 50 to 52% from 2005 levels by 2030 to create a hundred percent carbon pollution free power sector by 2035 and achieve a net zero economy by 2050. So the bill at the moment is obviously going to change as it's actually being put into action. There's a plan that the white house has put out. There's a bill that's going to be signed, but when things toward implementation, there will likely be changes.

Mike Disabato:

And the fact that I'm reading the contents of the bill from the white house's fact sheet could be constituted as a political bias, but since I'm not a political commentator, and I would like to actually

have a conversation about the deal today, we're going to assume the details the administration gave will be more or less what's put into practice and it splits the one trillion US into eight buckets. Some of which overlap. Loosely, the buckets are follows. Transportation, both public and the electric vehicle type, clean energy production and transmission.

Mike Disabato:

Resilience investments, I'll call them, which is basically investing in both physical climate risk protections and ensuring people have access to clean water and cleaning up old pollutions, such as capping orphaned oil and gas Wells, and putting more money into the cleanup of the heavily polluted Superfund sites. So today we're going to translate those buckets into likely economic outcomes. And to help me with that, I have five different voices for you today from five different colleagues. And first you're going to hear from my co-host Bentley Kaplan, because he also covers what can be termed as public infrastructure companies for us.

Mike Disabato:

I'm talking railroads, airports, Marine ports, all that. And there was nothing bigger in this bill than the money pledged to grade the US's public transportation infrastructure. The deal will invest 66 billion to provide healthy, sustainable transportation options for millions of Americans by modernizing and expanding transit and rail networks across the country. It will replace thousands of transit vehicles, including buses with clean zero emission vehicles. And it will benefit communities of color who are twice as likely to take public transportation and often lack sufficient public transit options. So how does all that translate into companies ESG factors? I asked Bentley.

Bentley Kaplan:

That part of the bill is quite interesting because for mitigating climate change, more people on public transport and public transport that has lower emissions is pretty much a no-brainer. You can move some big numbers that way. And the upsides for companies as a result of these kinds of investments are going to accrue to rolling stock manufacturers or rail technology providers. And I would expect for construction as well, whether that's retrofiting current train lines or building brand new ones.

Bentley Kaplan:

And as a knock on effect, you're going to see companies that are looking to cut their emissions from business travel for example, they're going to have options to do that. Because as soon as you put in rail transport, you can rarely reduce your emissions if your employees aren't having to make flights from city to city, if there are more sustainable options.

Mike Disabato:

Business travel is part of a company's scope three emissions. Business travel is a large part of the financial service industry's carbon footprint, for example. And just to put a point on Bentley's comment there, the difference in emissions, both carbon and otherwise from planes compared to trains is immense. Traveling will one kilometer by plane emits around 250 grams of various pollutants. For trains that same kilometer only emits six grams. So that is what, 95% less emissions per kilometer between the two?

Bentley Kaplan:

It's interesting because the US has had this very long love affair with cause, right? And arguably this has led to sort of the very slow development of more passenger rail networks even the proliferation of intra city, public transportation options, right? So people are driving their cars most of the place, it doesn't always make sense to put in new bus routes or to upgrade some of that infrastructure.

Bentley Kaplan:

So in many ways you actually need eat this kind of large scale effort that's not just going to drop in a bunch of electric buses into the current system and hope for the best. Okay? It's actually about adding in supportive infrastructure that's going to enable a more successful uptake.

Mike Disabato:

Don't worry though, the US is not abandoning cars. Don't fret. The infrastructure bill also put aside 7.5 billion to build out the first ever national network of electric vehicle chargers in the US. The deal will provide funding for deployment of EV chargers along highway corridors to facilitate long distance travel and within communities to provide convenient charging where people live, work and shop.

Mike Disabato:

And that includes funding that will have a particular focus on rural, disadvantaged and hard to reach communities. Now you know this is music to the ears of the car industry that as we've talked about often is already shifting their priorities away from the internal combustion engines toward an electrified fleet. And the bill also promises around five billion for low emission school buses. Now 7.5 billion and five billion might seem light compared to the over a hundred billion put toward public infrastructure.

Mike Disabato:

That is a 66 billion Bentley just talked about and an additional 42 billion we didn't discuss that's put aside to address repair and maintenance backlogs logs to reduce congestion and emissions near ports and airports, and to drive electrification and other low carbon technologies. It's not small when you think about all the money the Biden administration has already promised to the auto industry to electrify its fleet. And so to talk about that, I called up our car master Yu Ishihara to discuss all deals that the Biden administration has made and kind of put it into context with this infrastructure bill.

Yu Ishihara:

So back in August 2021, Biden signed an executive order targeting 50% of new car sales to be zero emissions by 2030. And so the build out of a national charging infrastructure will obviously help support customer demand and manufacture sales for electric vehicles. In terms of impact on companies, most of the incumbent car makers in the United States likely stand to benefit.

Yu Ishihara:

Starting with a company like GM, which has one of the most aggressive electrification targets globally. They're looking to completely phase out internal combustion engines by 2035. And they've already backed this up by investing several billion dollars in two battery manufacturing facilities with partner LG Chem in Ohio, in Tennessee.

Mike Disabato:

And GM is not alone in this. A lot of other auto majors, Ford, Toyota, Hyundai have invested in either battery plants or electric vehicle facilities in the rust belt buoyed, as you noted by promises by the US administration to support their efforts. Which shouldn't be lost in all of this also is a location of where these facilities are being built. The rust belt are the states in the US where they were most dependent on and affected by the variations of the auto manufacturing sector.

Mike Disabato:

An economic transition can only be orderly and successful if it doesn't displace those that's trying to help. And electric vehicles require way less workers to build than conventional cars due to part differential. And so with these battery plants, they can kind of save some of the jobs that these auto manufacturers would definitely lose as they shifted from internal combustion engines to electric vehicles. I also asked you about that five billion that was put toward low carbon school buses. There's actually half a million school buses in the US. Most of them run on diesel and they have been linked to some nasty health effects for the kids that they transport.

Yu Ishihara:

And although the bus market, specifically the school bus market, is a bit separate from the traditional automotive industry with different players. Companies like Blue Bird Corporation or Thomas Bus, Thomas Built Buses, which is a subsidiary of Daimler Trucks North America and IC Bus, which is a subsidiary of Navistar. These are the major players in the US school bus market. And so the infrastructure deal could certainly pay dividends for their electrification efforts.

Mike Disabato:

All these benefits might be moot if the electricity that charges these vehicles, batteries is produced using dirty fuels. And as of 2020, non-hydro renewables accounted for only 12% of the US's energy generation. The majority was natural gas followed by coal, then nuclear.

Mike Disabato:

To address this, the deal promises more than 65 billion IS investment in clean energy transmission and in the electric grid, including building thousands of miles of new resilient mission lines to facilitate the expansion of renewable energy. Which basically means utilities are going to get upgrades. My colleague, Matthew Lee covers utilities for us. So I called him up to hear his thoughts about how this deal will affect the utility sector.

Mathew Lee:

A couple of themes or perspectives that might benefit from this. So A, if you're a pure play renewables developer, this is great news, right? Because it opens up more opportunities and projects that become viable. Now that the transmission and distribution infrastructure is improved and can deliver the electricity you generate out to customers back to the grid. Also, if you already have capital, capital expenditure is plan for renewables, you get to capture this efficiency, right? The subsidies or the innovation that comes from it, that helps you to deploy renewables more.

Mathew Lee:

If you're already in this space, you're probably going to capture that efficiency better than somebody who's just trying to start out. Sort of a first mover advantage if you will. So definitely utilities that already show in their capital expenditure plans, a high allotment towards renewables, they're benefiting from this too. Another aspect to look at is what are utilities that currently have a lot of installed capacity for renewables, but there's actually a gap when they generate in terms of their generation mix, the renewables aren't that high yet.

Mathew Lee:

That suggests that the grid itself right now, isn't able to fully take advantage of the renewables they've already brought online in terms of actual generation. And so those utilities will definitely benefit from this too, because they already have sunk in all the capital and built out and brought online the generation projects. They now just need better transmission infrastructure to take advantage of it. Yeah. And finally, there's always this last bucket, which I call the wave riders, right? So maybe they're currently more fossil fuel intense, their generation mix isn't that clean, but based on the capital expenditures here, it lessens the cost of them to engage with the energy transition.

Mike Disabato:

For this one, Matt thinks the companies that immediately take advantage of the allocated capital are the ones that already have a foothold in the industry, pure play companies that focus on renewables, utilities that have already established battery storage capabilities and can now access the grants that this deal puts into place to continue to develop those technologies. Places like that. The theme here is obviously advancement.

Mike Disabato:

Advancement of tech already used in large parts of our economy that just needs a boost. But there are also the energy companies that are researching and advancing next generation technologies. Those that need more capital infusion to get off the ground like advanced nuclear reactors, carbon capture, and clean hydrogen. They too will be provided some of these 65 billion that is allocated in this part of the deal.

Mike Disabato:

And yes, this allocation is literally the last sentence in the white house fact paper that was put out about the deal. But new tech is extremely important for our lowering emissions and for the market economy in general. So I called up Chris Cote, my colleague who covers the wider energy sector for us. And I asked him about what I'll call the wizard part of the deal.

Chris Cote:

Politically, it makes sense that these are the technologies that made it into a bipartisan bill. They're decarbonization levers that involve the oil and gas supply chain and traditional heavy industry. With these funds, the US Congress is signaling its support for earlier stage climate solutions that still need a bit of a boost to get off the ground. They're not experimental, but they may not yet be cost competitive on their own.

Chris Cote:

For carbon removal, a large focus in the bill is on direct air capture, a relatively nascent technology that pulls carbon dioxide directly out of the air. There's also more efforts to test and build out carbon dioxide storage systems and some money to speed along the permitting process. Right now only North Dakota and Wyoming have permits to permanently store carbon dioxide underground. Louisiana and Texas, which plan to store CO2 in former oil Wells under the Gulf of Mexico are now getting in line.

Mike Disabato:

That's the kind of even keeled voice I like to hear during the wizard section of a podcast. But carbon caption storage isn't without its issues. The process itself is energy intensive. It'll contribute to local air pollution, which will impact the same communities this bill attempting to protect. Still, it is important for retrofiting old pollutive power plants with the tech.

Mike Disabato:

And there are a number of utilities that are already relying on this sort of tech to meet their climate goals or planning to rely on the sort of tech to meet their climate goals. So there you are. What about hydrogen, a fuel source that has been promoted by many including airlines as a viable, clean alternative to fossil fuels?

Chris Cote:

For hydrogen, the public spending in the bill is meant to jumpstart investments in a technology that's not yet cost competitive by targeting investment in four hydrogen clusters. It'll also increase financing for research and development.

Chris Cote:

The US has taken a largely agnostic approach to how hydrogen is produced focusing instead on the final emissions footprint of that process. So there's likely to be environmental pushback against so-called blue hydrogen, which uses natural gas to produce the hydrogen and then captures and stores some of the CO2 from the emissions intensive reform process.

Mike Disabato:

Up until this point, we've been looking at proactive changes to fix the future, the proliferation of public transport, the growth of electric vehicles, the updating of our energy systems. But remember that part of the bill I mentioned at the beginning, the resiliency part, the cleaning up old pollution part? Well, the part of that, which is applicable to companies that we cover is dealing with climate resiliency. Some of the damage climate change will cause is already baked in.

Mike Disabato:

Water is becoming scarce around the world and more of our infrastructure is vulnerable to flooding or fires. To deal with those issues, the deal put forth 55 billion to expand access, to clean drinking water for households, businesses, schools, and childcare centers across the country. And over 50 billion to protect against droughts, heats and floods. Aside from transportation, this is definitely the biggest spend in the deal.

Mike Disabato:

The water part of the bill is a larger issue, and we're going to address it in a later episode. But physical risks due to climate change, that we can kind of put into context a bit more quickly. To do that, I called up my colleague, Gillian Mollod, who analyzes and maps out the physical risks for us and talk to her about the current state of flood planning in the US.

Gillian Mollod:

So yeah, flood risk is... Understanding flood risk is super important in the United States. And a big reason for this is because currently the amount of properties that are susceptible to flooding has been vastly underestimated. A recent study came out to say that possibly twice as many properties as were initially thought to be susceptible to flooding are susceptible. And this is in part because the FEMA flood maps have not been updated since the 1970s.

Gillian Mollod:

And since climate change has become a reality, we are starting to see an increase in frequency and intensity of storms. And this is really increasing flood risk. And we're not just seeing the typical flood risk from coastal flooding, but we're also seeing a lot of inland flooding as well, coming from either rivers or coming from a lot of rainfall. And there's just a really important need to update these flood maps, because what happens is FEMA draws these flood maps and that's where mandatory insurance, that's where people are forced to get federal insurance to protect against flooding.

Gillian Mollod:

And really what we're finding is that when floods do affect an area, it doesn't just affect one or two houses, it can affect usually an entire community. And this is really where we need to start thinking about large infrastructure projects, which mitigate against flooding. And oftentimes, if you think about it, if a hospital gets flooded or a school gets flooded, that doesn't just affect a family, it affects the whole community. And really understanding where these flood risks are located is super important. So that's really what companies are working at now, is trying to understand their risk. Then this is becoming incredibly important in the commercial real estate market and also in general in just where buildings and operations are located.

Mike Disabato:

So a bit of a Merry go round here on this recap. And there's a lot of the bill that we didn't touch on. Not just the water issue, which is extremely important and something we have sort of discussed in earlier episodes of this podcast. For example, the drought in Taiwan and its effect on the semiconductor industry. The problem of water is one of hidden infrastructure. Think of when a construction crew on your block has to dig a meter down to replace one section of pipe, of privilege of availability and the struggle between economic interests and community ones.

Mike Disabato:

There's also the cleanup projects that the deal tries to address. Superfund sites are highly polluted areas that are designated by the EPA. And once done so, allows it to clean up contaminated sites and can force parties responsible for the contamination to either perform cleanups themselves or reimburse the government for EPA led cleanup work. There's a long list of sites though, that are ignored by both companies responsible for the problem and the governments that originally allocated funds to clean them.

Mike Disabato:

But we really have to wait and see what happens with those sites to kind of comment on them and to discuss the companies that might or might not be liable for their cleanup. Another major part of the deal that we didn't touch on was the plugging of old oil and gas Wells. Those areas that have been orphaned by companies that operate them and leak methane, a highly potent greenhouse gas that is 25 times as potent as carbon dioxide at trapping heat in our atmosphere.

Mike Disabato:

During our conversation about R and D, Chris talked to me about those oil and gas Wells. And to be honest, I did not know where to put it in the up episode since it wasn't really like the others. But I did want to add it in at the end because I think it perfectly encapsulates the problem of climate externalities that we often talk about in ESG of unaccounted for corporate costs that are now going to be paid by the taxpayer because they weren't dealt with when they needed to be dealt with.

Chris Cote:

We don't really know how many of these abandoned unplugged Wells there are. One recent study estimated there are upward of 80,000, mostly spread out across Appalachia and Oklahoma. But the study admitted that this is likely to be an underestimate.

Chris Cote:

While getting more federal money to plug these leaky and forgotten Wells is undoubtedly a good thing, the spending does show another way in which the government helps out oil and gas companies. In this case, by pushing the cost of the industry's mess onto the taxpayer. This is also effectively what a lot of the spending on climate is doing as well.

Mike Disabato:

That's something we might also visit in a later episode. These administration bills are risky things for us to cover. They will likely change. There is the build back better bill that allocates a lot more capital to climate change that is currently stuck in the US Senate and nothing is really ever set when it comes to governments and money. But the reason we did is because this is a signal that capital is really starting to flow toward companies that are providing solutions to climate change. This bill, the announcement that China and the US want to work together, COP26, they are all parts of a larger advancement.

Mike Disabato:

And that's it for the week. I want to thank Bentley, Yu and Matthew and Chris and Gillian for discussing this week's news with an ESG twist. And I wanted to thank you so much for listening. If you like what you heard, don't forget to rate and review us. That helps push us above whatever other podcasts are out there. We want to be the top. And subscribe if you want to hear me speak every week. Thanks again and talk to you soon.

Bentley Kaplan:

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Bentley Kaplan:

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