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Carbon Frontiers | Episode 9

Rachel Walsh, Carbon Innovation Analyst, BMO Capital Markets

This week on our Carbon Frontiers series, we welcome Rachel Walsh into the SmarterMarkets™ studio. Rachel is Carbon Innovation Analyst within Equity Research at BMO Capital Markets. SmarterMarkets™ host David Greely sits down with Rachel to discuss how recent press coverage of voluntary carbon markets is impacting the companies that participate in them, how companies are using the voluntary carbon markets to meet netzero commitments, and the big trends that will help determine where we go from here.

Rachel Walsh (00s):

The voluntary carbon market, while it is very nascent and lacks transparency, it has actually been around for decades. But we do believe that 2023 is going to be a critical evolutionary year for this market. There are some transformational changes that are going on, and I think that companies that can position themselves appropriately in advance of these changes will ultimately benefit.

Announcer (23s):

Welcome to SmarterMarkets, a weekly podcast featuring the icons and entrepreneurs of technology, commodities, and finance ranting on the inadequacies of our systems and riffing on ideas for how to solve them. Together we examine the questions are we facing a crisis of information or a crisis of trust and will building Smarter Markets be the antidote?

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David Greely (01m 02s):

Welcome back to Carbon Frontiers on SmarterMarkets. I'm Dave Greely, chief Economist at Abaxx Technologies. Our guest today is Rachel Walsh. Rachel is the Carbon Innovation Analyst within Equity Research at BMO Capital Markets. We will be discussing how recent press coverage of voluntary carbon markets is affecting the companies that participate in them. How companies are using the voluntary carbon markets to meet net zero commitments and the big trends that will help determine where we go from here. Hello Rachel, welcome to Smarter Markets. I wanted to first thank you for being here and you know, as a former analyst myself, I wanted to ask you if you could start us off by telling us a little about your work. You're the Carbon Innovation Analyst at BMO Capital Markets and I was curious, how would you describe your role and your coverage area?

Rachel Walsh (01m 52s):

Well, thank you David and first off, I do just wanna say thank you to SmarterMarkets. This does continue to be one of my favorite podcasts and I'm very humbled by the opportunity to be a guest on the show. But in terms of my role as Carbon Innovation Analyst at BMO, you know there are two main facets to my coverage. So first, from a thematic perspective, I cover anything that puts a price on carbon, whether that be explicitly or implicitly. So that would include things like carbon markets, both compliance carbon markets and the voluntary market clean fuel standards as well as tax credits for low carbon technologies. And then the other part of my coverage includes the many technologies and companies that will generate revenue through these carbon price mechanisms. Now, I do believe that I am one of the only dedicated carbon analysts on the sell side and I think that speaks to BMO's dedication toward being a thought leader on the subject of carbon.

David Greely (02m 52s):

Well this is great because now we can have a really wide ranging conversation about the carbon markets, which is what I was looking forward to.

Rachel Walsh (02m 59s):

Yeah, absolutely.

David Greely (03m):

And I guess in the interest of full disclosure, I should mention that you cover Base Carbon, which is one of our sponsors here at Smarter Markets and so I won't ask you any specific questions about Base Carbon, but I do want to get your thoughts on some of the big trends

affecting your coverage area, which is, as you said, the carbon markets broadly one of those is the recent negative stories on certain aspects of the voluntary carbon markets from certain parts of the media and I was curious, how are you assessing those stories now. Are they accurate and are they highlighting an important problem?

Rachel Walsh (03m 35s):

Yeah, so just for the benefit of our listeners, I think it would help to point out one of the main criticisms from these articles and it has been the potential for over crediting in certain project types within the voluntary market, largely targeted at red plus credits and that stands for reduced emissions from deforestation and forest degradation. That can really just be thought of as a credit type that represents conservation for certain natural ecosystems. Now there's a lot to unpack here in this discussion, but first on the accuracy component. The technique that these articles relies on heavily, which uses synthetic controls to create a proxy area for developing baselines, this is seemingly flawed, but I do think it speaks to the challenges with measurement in certain parts of carbon markets. Especially when subjective analysis is required to determine base case scenarios. So this base case, what it represents is the situation that would have occurred without the carbon project in existence.

Rachel Walsh (04m 42s):

And this is the basis from which we measure. So in other words, it will ultimately determine the total volume of credits that are issued under a certain program from the registries. As you can imagine, there is no perfect science in predicting the future and ultimately rates of deforestation are gonna be subject to things like behavioral changes economic impacts within communities and these are things that are really challenging to predict. So while the main registry in question has pushed back against these allegations, they've also reacted by announcing that they will be streamlining and improving their red methodologies to ensure that they are applied consistently and to also ensure that they reflect best practices. I personally think that this is a healthy reaction to this criticism you know, I have consistently stated that growth in this market is ultimately gonna be predicated on its ability to provide high integrity products.

Rachel Walsh (05m 39s):

I think even the impression of low quality, whether it is warranted or not could negatively impact demand in the voluntary market. Purchases in this market reflect voluntary action and if corporate reputations are at risk, demand is ultimately gonna dry up. But I do just want to make, make two other points on the topic because I think that these negative articles really missed the point for a few reasons. First off, the use case for these credits is not even considered, which is critical in my mind. You know, these articles claim that this market facilitates green washing, but for that to be true, these credits would need to be used to assist with false or inflated claims on the part of the buyer. You know, we looked at disclosures from all of the corporations that are mentioned in this article. We find that this is largely not the case as these companies seem committed to lowering their emissions internally before even considering the use of these offsets.

Rachel Walsh (06m 38s):

And then one last major point of contention that I have with these articles is that they tend to identify issues with the voluntary carbon market but then fail to provide any alternatives. You know, according to the IPCC deforestation and forest degradation represents 11% of global anthropogenic emissions. I think it's really important to consider that there is an opportunity cost for these communities when they choose not to develop their natural ecosystems. Whatever the issues are with red plus credits, I have yet to see a better method of climate finance that compensates these communities for this and for the volume of carbon that remains stored in these reservoirs. This is really important in jurisdictions where government regulation is lacking and this is clearly the case in many places around the world where we see rampant deforestation.

David Greely (07m 32s):

And I like to just highlight a couple of the points you made because I think they're quite important. The first is there's been no allegation that the measurement has been mismeasured on what was cut down versus what wasn't cut down. Right, so the argument is strictly about the counterfactual of well that wouldn't have gotten cut down anyway.

Rachel Walsh (07m 53s):

Yeah, exactly.

David Greely (07m 54s):

Which of course counterfactuals are tough and then the other is, in fairness to the registries, a lot of the, the progress on continually improving the red methodologies has been in progress for quite some time. I know some of the articles stated that it was indirect reaction implicitly to the story, but this is something that's been going on for probably the better part of a decade is my understanding. Is that right?

Rachel Walsh (08m 19s):

Yeah, absolutely. These registries continue to improve their methodologies across the board as the science develops and as you mentioned the counterfactual changes as well.

David Greely (08m 29s):

And I wanted to ask you, because I found it a really interesting point around how corporations are actually using these credits in line with their overall net zero approach because as you said these have been a very important way to get carbon finance to preserve ecosystems that could otherwise be in danger and so I was curious from your vantage point, how has the recent press coverage and the underlying issues themselves been affecting corporate net zero behavior and the availability of carbon finance?

Rachel Walsh (09m 02s):

So I would say that we have seen increased hesitancy on the part of the buyer of offsets and that can be observed through the drop in overall volume traded in the voluntary market. Again, this market does facilitate voluntary action to lower net emissions and you know, any element of reputational risk here is gonna cause hesitation but I would also say that the apparent pullback in demand is also being compounded by inflation and increasing interest rates. You know, while companies are still working to reduce their emissions, it seems that these initiatives, especially offsetting has fallen in priority and that is a direct result of the changing priorities from both investors and consumers. With investors choosing to focus more acutely on near term financial results and returns and consumers prioritizing affordability in the near term. You know, as a result it's difficult to quantify the exact volume that's being driven away by negative press, but we are seeing it to some degree.

Rachel Walsh (10m 02s):

One behavior that is an indication of this is something that is called green hushing. And this is where companies might still be engaging in these green initiatives but they are not advertising them outwardly as much and that's just to avoid potential scrutiny. You know, for example, some companies are beginning to make statements like they are spending 1 million to protect the rainforest in certain jurisdictions instead of mentioning the total tonnage of credits purchased, you know, you're not mentioning specific volume that leads to less scrutiny overall. You know, in addition to that, I would say an increasing number of corporations are now kind of waiting for official guidelines on off settings to emerge just so that they have something to point to say that they're using offsets appropriately. We do expect one of these to be released by the voluntary carbon markets integrity initiative in the coming months, which could act as a catalyst for demand for corporate buyers in our mind. But we do think that there is a consensus that has formed around offsetting best practices and that thoughtful offsetting can take place. In the meantime before the VCMi does release those official guidelines.

David Greely (11m 11s):

It's, it's fascinating that the carbon markets, although they're still very young, they're already susceptible to typical market forces like interest rates and financial cycles. I wanted to ask you in all the stories, the issues around green washing, green hushing to some extent we're seeing competing narratives over kind of a common set of facts or a common set of events and I was curious on your view of it, do you see the voluntary carbon markets as more of a tool or more of a threat to achieving net zero and why?

Rachel Walsh (11m 47s):

Yeah, I do think that these competing narratives are unfortunate given the need for immediate action in order to meet these ambitious climate goals you know, while I think it's completely necessary to address issues that exist in these markets and improvements that need to take place, you know, it also needs to be realized that they are an effective and critical tool to help reach net zero and this is for many reasons, but just to quote a few of them. Based on current emissions projections, CO2 will have to be removed from the atmosphere to meet temperature goals. In my mind, carbon markets represent one of the most efficient ways to finance these removal activities and these activities would include things like planting trees and even direct air carbon capture, which I'm sure as some listeners are aware, is extremely expensive. In addition the net in net zero does imply that some degree of offsetting will be required and this is because the complete elimination of some emission sources is not technologically feasible and those carbon emissions are going to have to be removed from the atmosphere as a result.

Rachel Walsh (12m 55s):

And then lastly, I think it's really important to consider how efficient market-based mechanisms are at reducing emissions at the lowest possible cost. Not all companies or nations can reduce emissions at the same cost you know, by creating a tradable fungible carbon market emitters can finance lower cost options near term while they wait on technological breakthroughs that are required for some of their more expensive internal opportunities. This is gonna result in more significant reductions near term with the same amount of capital investment. To put it into context, the International Emissions Trading Association has a figure that I love to quote. They estimate that if we had a functional international carbon market, and to be clear we will not anytime near term, but if we did, it could drive cost savings of \$250 billion US just in reaching the 2030 goals under the Paris agreement. If that capital were reinvested, that could potentially result in an additional five gigatons of annual emissions reductions, which would represent about 8% of global emissions. That's very significant near term.

David Greely (14m 07s):

I love that figure that you use also, especially when you converted from the dollars saved, which many people don't necessarily see that as the most important thing. But when you see it as when you reinvest that how much more carbon you can remove from the atmosphere and 8% of annual emissions is a big figure in terms of the additional carbon emissions that could be reduced or removed.

Rachel Walsh (14m 30s):

Yeah, and I do think it's important to consider a lot of those opportunities. They don't have access to capital, so the redistribution of capital through a market-based system, you know, that is what is creating those additional reductions.

David Greely (14m 42s):

And I was curious, when you look at the companies and their approaches right now, whether it's on those traditional industries trying to reduce emissions or you know, some of the newer companies that you cover that are more focused on carbon reduction projects, what do you see as the current best practices and how do you think about if a company is approaching things the right way?

Rachel Walsh (15m 05s):

So as I did mention, there are no official guidelines at the moment currently waiting for those, but there are several sources of best practices when it comes to corporate offsetting. Just to touch on some of the more salient points that form a consensus there, all of them state that high quality offsets should be purchased and that offsetting should be used as a last resort. So just to break down what that means, companies need to follow an emission mitigation hierarchy. These mitigation hierarchies are not new. You can think of the popular reduced reuse recycle slogan that we all know very well and these hierarchies ensure that externalities are being reduced in the most impactful way possible. So to be specific here, this means that a company would first need to avoid emissions from the onset. And this can be done by incorporating carbon pricing into project models to have a more holistic view of project economics overall then a company will need to reduce emissions at which point the company can then consider substituting or replacing carbon intensive energy sources with low carbon sources where possible.

Rachel Walsh (16m 19s):

Now at some point, all of these options are either not going to be technologically feasible or the cost of doing these is going to become preventative. At that point in time, the emitter can then consider offsets to address the amount of emissions that is remaining but again, the company should do its best to reduce emissions internally before even considering offsetting. In contrast, if we were to think of an extreme example where a company was doing absolutely nothing to lower their emissions footprint and then using offsets excessively and claiming that they had achieved net neutrality, you know, that certainly would be considered green washing and should not be encouraged in this market.

David Greely (16m 59s):

Yeah, no the, the hierarchy is definitely one that people adhere to as an economist by training. It's always struck me a little bit strange, you know, I just think of it in terms of am I supposed to raise my own food or so my own clothing until it's just too hard and then I'm allowed to go and buy it in the market, but I see where people are coming from in terms of, you know, wanting to make sure that people are really making a good faith effort to reduce their own emissions first, but I guess I can't get by the economics training. Maybe moving on, I was curious, you know, in what areas do you see carbon offsets being used well because I think sometimes even with the carbon hierarchy, you know, there's the presumption that they're not gonna be used well and that's why you need to do it internally first, but what areas do you see them being used well and then also where are they being used poorly?

Rachel Walsh (17m 46s):

So, you know, I just touched on the need to, to reduce emissions and then use offsets as a last resort. But in order for us to observe that that best practices are indeed taking place, it's gonna require a company having detailed and robust disclosures when it comes to both emissions and offsets. So specifically that's gonna require the disclosure of the role of offsetting by an emitter and then reference, specific reference that they are being used as a last resort. In addition to that, a company's emissions volume need to be disclosed separately from the volume of offsets, and that's in order for stakeholders to really view that a company is actually making progress on those internal emissions reductions. Both of these might ultimately be required by the SEC interestingly enough, and we're gonna get some clarity on those rules for emissions disclosure. Potentially in the coming weeks, I do find that the poor use of offsets is usually tied to limited or no disclosure.

Rachel Walsh (18m 45s):

And as a result of that, you know, it's not observable for me to see if offsets are being used as a last resort, but I would also include offsetting at checkout under a poor use of offsets and this is simply because I do not think that the average consumer has the level of education that's required to understand the overall impact from their consumption behaviors. You know, even in a circumstance where they are pairing back consumption with offsets, ultimately if they did, they might choose not to consume and the idea that they might be able to completely offset their impact can have kind of false state of confidence from the consumer in a sense of what their net impact is and as an example of offsetting at checkout, we do see that provided by certain airlines while purchasing flight tickets for consumers and then also at the pump at some fueling stations. Now obviously this education level on the appropriate mitigation hierarchy for consumers could be improved over time, you know, just as the reduced reuse recycle slogan was amplified but at the moment I think that's missing.

David Greely (19m 54s):

And does it seem like that's connected to those being perhaps more marketing strategies than like the real operational strategy of the company?

Rachel Walsh (20m 03s):

Yeah, I think so. I think it does give the consumer some comfort in their purchase and you know, overall it is a low dollar percentage of their overall purchase. So it's a very easy decision for the consumer to make. Now I will say that these corporations do disclose that the purchase of offsetting is not a perfect replacement of consumption behaviors, but I really doubt that the consumer is going on to each individual website and seeking out those disclosures.

David Greely (20m 33s):

Yeah, I think that would be my behavior. I think and I said as a former analyst, I know often one of the, the challenges of the role is being able to get the information you need to make proper assessments. You mentioned, you know, the SEC may be coming out with some more rules for more disclosure. What do you see as like the state of information now. Like how much do you think you're getting roughly relative to what you'd like on the wishlist?

Rachel Walsh (20m 58s):

I mean, so I have gone into deep analysis on this. We checked disclosures for the entire BMO coverage universe, which is over 900 companies and we found that generally, specifically in terms of offsetting disclosure was lacking or non-existent. So there does need to be improvement there. I would say overall to no surprise it got better as market cap increased but I think that just speaks to the level of sophistication within certain companies you know, we do believe that disclosure requirements are only going to increase. You can see this as a result of the SEC decision that's coming, and ultimately I think that's gonna drive demand into higher quality parts of the market, which leads to our thesis that there's a greater degree of price appreciation potential in those higher quality parts of the carbon market as a result.

David Greely (21m 49s):

And I wanted to get a sense from you of how do you evaluate the companies that you cover. I know you started off covering ENP in the oil and gas sector, so I was curious like what's your framework for thinking about these companies and how similar or different is it to, you know, what you learned in the ENP side?

Rachel Walsh (22m 07s):

Yeah, I guess my ENP background might give away my strategy for coming up with the target price here, but I do tend to be quite conservative overall when determining the value of these companies. And I rely entirely on net asset value to come up with my target price. And this is ultimately the output of a discounted cash flow model where I only include revenue from existing agreements. I don't ascribe any value to additional potential streams of revenue or letters of intent, things of that nature and I would consider those to just be additional upside to my target. Now I've chosen to do that for two reasons. I do want my targets to be grounded in current reality and then I also do find that there's upside in these companies based on these very conservative assumptions but you know, as we've discussed another part of my pitch here we see the potential for reputational risk on the part of corporate buyers when engaging in this voluntary carbon market and that has been part of my pitch for engaging in companies like Base Carbon or the other streaming like business models that do exist and this is because they provide a layer of due diligence for both corporate buyers and also the investors that are looking to get exposure in these markets. These companies are partnering with project developers, they know that these are high quality projects and they do have a level of comfort when engaging with project partners.

David Greely (23m 30s):

And we've talked about, you know, a couple of the big forces that are affecting the companies that you cover, the reputational risks, some of the negative media coverage, some of the economic cycle that we're in currently, but I'm curious, like are there other big forces that are affecting these companies that we should be keeping in mind?

Rachel Walsh (23m 49s):

Yeah, I have alluded to a couple, but I'll spell the mountain plain language here. The voluntary carbon market, while it is very nascent and lacks transparency, it has actually been around for decades, but we do believe that 2023 is gonna be a critical evolutionary gear for this market. There are some transformational changes that are going on and I think that companies that can position themselves appropriately in advance of these changes will ultimately benefit and you know, the opposite is also true for the ones that are unable to do that. So, you know, specifically some important items include the release of the core carbon principles, which we saw just a few weeks ago. We're still waiting on details from the assessment framework and project specific items and this is released from the Integrity Council for the voluntary carbon markets, which was born from the task force for scaling voluntary carbon markets.

Rachel Walsh (24m 40s):

They realized that if they were gonna scale them, they needed to improve the integrity of these markets. So ultimately this initiative is going to result in certain crediting programs and projects receiving official tagging from this group, which for short form I'll refer to as the ICVCM, if these credits are able to receive this tagging, it's gonna reflect that those projects represent the utmost quality in this market and meet a certain level of standard of credit quality. I think as a result of that, you know, these credits are gonna be highly sought after by buyers and are gonna receive a price premium as a result in contrast credits that fail to receive that take and could drop in value. Other elements that have caused some turbulence in this market are the collision of domestic compliance carbon markets and the voluntary market. You know, under the rules of the Paris agreement, and I won't go in too much detail here to spare our listener, but through something called Article 6, you know, it appears that governments do have a certain degree of control when it comes to approving the export of voluntary credits.

Rachel Walsh (25m 46s):

We've seen some interference in Indonesia as well as India and certain project types and this has led to the restriction of export of credits for some project developers. Now, while the details on Article 6 have yet to be finalized, it does remain difficult to predict where these restrictions will occur as well. Its existence creates an element of risk in these markets, but it also creates an opportunity as well. You know, similar to the ICVCM tagging, we believe if a credit can receive Article 6 tagging, which would mean that it's been approved for export by nation states, we think that that could garner a premium in the market. So certainly some material developments going on in this market, we believe that companies that can position themselves well will benefit but you know, we do expect that we'll receive continued clarity on these items in the coming months.

David Greely (26m 39s):

And I wanted to ask you a question about the core carbon principles from the ICVCM. This might be asking you for a hot take as they've, you know, only come out recently but in terms of companies that would be looking to meet that standard or get that tagging, is it fairly operationalized like if you were to say, oh, this credit meets that standard, how hard is it to show that at this point?

Rachel Walsh (27m 01s):

I think the ICVCM does intend to look at things from the program LE level, and that's gonna come out in a phased approach. So we expect the first programs will be receiving ICVCM approval in the third quarter, and then you'll see step change from there as they're able to look at more and more types. I would say that just because something receives tagging first doesn't mean that it represents the utmost quality. It might simply be easier for the ICVCM to interpret, and that might include things like credits that reflect technologies, because as we've mentioned with some of the conservation programs, those are more difficult to measure. The measurability of certain technologies is a lot easier, and so it might just be a function of that.

David Greely (27m 45s):

That's great, thank you. So you, we've talked about some of the big forces and how they might be impacting the types of companies and the actual companies that are in the market right now, but I was curious, you know, when you look at them, do you see it changing the number of companies and the nature of the types of companies that you cover? I guess in particular, do you see gaps in the market that's creating opportunities for new types of companies?

Rachel Walsh (28m 10s):

So I think in terms of both the number and nature, it all ties back to the state of capital markets and specifically the public equity markets and each corporations, you know, want and need to engage in those markets. You know, I do believe there are currently several private companies that are kind of waiting in the wings for things to recover. So this would include more streaming and royalty companies potentially that engage in both the voluntary and compliance carbon markets, but it also may include some technology companies that might be looking to access capital markets in order to grow in the future and then when it comes to energy transition, I do think that there are many gaps that create opportunities for companies here. The act of transitioning of business to a low carbon intensity one is extremely complex and we are seeing a ton of startups emerging through different verticals.

Rachel Walsh (29m 02s):

Here you can see it through measurement and accounting of emissions, which might surprise some people is actually a very difficult task you know, once a company is able to measure their emissions, then they can start to make a plan on, you know, the most effective ways for them to address those emissions, which then includes an understanding of the technologies available to them and the costs of those options as well. So both an opportunity on the measurement as well as the advisory side of that business you know, companies may also mitigate the costs of these activities to some degree through the creation of things like compliance carbon credits as an example. But that alone requires its own level of expertise in understanding the complexities that come with carbon credit origination. And then once all those options have been exhausted, you know, the company might look to purchase different forms of offsets both in compliance and voluntary markets. So I think while the direction of travel might be clear here for energy transition, the specific expertise required at each step are really underappreciated. And in my mind they do create a lot of opportunity for emerging businesses you know, I would like to mention that BMO fully appreciates this, and that's part of the reason they chose to purchase a business that specializes in all of these items through the purchase of radical balance.

David Greely (30m 22s):

And I guess that's a good lead in to the last question I'd like to ask you today and thank you for being here with us, which is how do you see your space, the carbon innovation space evolving over the next few years with all these opportunities and all and the big forces operating on them?

Rachel Walsh (30m 38s):

You know, I do think, and I, I kind of alluded to it, but as equity markets improve, we're gonna see a lot of key technology companies come to market here at the moment. There are several of them that are taking their technology from pilot to commercial stage, and they may be looking to the markets in the future for growth capital. You know, in addition to that, I do believe that the carbon markets that these companies will be generating revenue in are going to mature and as a result of that there's gonna be more credibility from investors and corporations that's ultimately gonna drive growth in these markets and we anticipate that growth will be very significant in the coming years and decades.

David Greely (31m 21s):

Thanks again to Rachel Walsh, carbon Innovation Analyst with Equity Research at BMO Capital Markets. We hope you enjoyed the episode. Join us next week as we continue to explore the Carbon frontier on Smarter Markets. We hope you'll join us.

Announcer (31m 36s):

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