

# Aquaculture's Rise and Electric Snowmobiles

## **Featuring:**

**Helen Marlow**, ESG Research, MSCI

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## **Bentley Kaplan:**

Hello and welcome to the weekly edition of ESG Now, the show that explores how the environment, our society and corporate governance affect and are affected by our economy. I'm Bentley Kaplan, your host for this episode. On the show today, we are going to get into two stories. First up, we take a look at the growing industry of aquaculture, the farming of fish and shrimp. We'll take a look at its impacts on biodiversity, the shape of regulations and what it means for investors. Then we'll hop onto our snowmobiles and head into the world of climate disclosures as we unpack the response of US company Polaris Inc. to an SEC letter issued earlier this year. Thanks for sticking around, let's do this.

In our first story, we're going to talk to my friend and co-host Mike Disabato. When Mike is not behind the mic or wearing one of his many editorial hats, he's doing research of his own. And last month, Mike published a report called *The Biodiversity Effects of Aquaculture's Rise*, ably supported by our colleague and serial guest on the show, Gillian Mollod. Now aquaculture, for those nodding along uncertainly, is the farming of mostly fish, but also shrimp. And there are a number of reasons for doing this and of actually getting aquaculture done. Now, the upshot of aquaculture is that you can provide fish and shrimp for consumption without having to catch them from wild sources. But as Mike told me, for consumers trying to figure out whether their preference should lie with fish grown in aquaculture or those caught in the wild, it's not all that straightforward.

## **Mike Disabato:**

It's actually harder to answer that question than you might think. There's a bunch of different factors that go into play. Wild caught fish, you have a depletion of wild stocks, overfishing, nets that drag across the bottom, and you have bycatch. Well, with aquaculture, you have these biodiversity impacts, these ecological impacts that come with any system that is growing and farming a lot of animals in a single space.

## **Bentley Kaplan:**

Right. So this is the thing about aquaculture, it does stop fishing trawlers from going out into the open ocean and potentially overfishing or depleting fish stocks already under pressure. But to do that, you're having to make certain types of trade-offs. And as I spoke to Mike, we try to get to the bottom of what

these trade-offs could mean for investors as we increasingly come to rely on aquaculture as a source of food. The first trade-off we looked at is what aquaculture could mean for the natural environments surrounding these intensely farmed fish.

**Mike Disabato:**

You need to think about a number of things with regards to aquaculture and its impact on biodiversity. There's three we looked at, but there's a couple others that we didn't look at for this report. The three we looked at our facility type, what kind of facility the actual animal's grown in? How the company is dealing with disease and pest management? And what regulations are around the growth of those fish? Facility and type influences the material exchange that happens between your farm and the natural environment. Most salmon are bred, raised in inshore open cages. Those are those classic nets that you see in the water, you can look on Google Earth even and you see these giant circles that have nets going meters down. You have a lot of food, you have a lot of animals that are eating that food and then you have a lot of animals that are passing matter as they translate that food into energy.

And so what can happen is you have these massive eutrophication events that happen where all this sediment falls down to the sea floor bottom. If you get too much material, if you get too much nitrogen and phosphorus in an area, you can have a situation where there's something like a harmful algae bloom that occurs and you have a mass die-off of fish. The problem with inshore open cages is that they have this happen often and it's gotten so bad that companies with facilities located in Canada, such as Maui, Cermak and Greg Seafood are currently contending with new regulations set by the Department of Fisheries and Oceans Canada to transition the use of these inshore open systems to a more sustainable, semi-closed or indoor re-circulating aquaculture systems, which are also called RAS. They're also trying to build larger facilities farther out at sea because if you're farther out at sea, when the sediment falls from the fish, it doesn't immediately fall to the ground, it gets pushed around in the currents.

**Bentley Kaplan:**

Right. So in his paper, Mike drew on a growing body of literature on the subject of aquaculture. Including from institutions like the UN Food and Agriculture Organization, the PBL Netherlands Environmental Assessment Agency, the IUCN, government regulators and Academics. In addition to the various implications of different facility types, Mike also mentioned that he looked at pest and disease management. Much like in a concentrated livestock operation, think cows or chickens, aquaculture can also result in disease or pest outbreaks. And the UN Food and Agriculture Organization warned of long term production losses from disease if the risk was not managed carefully. Something that actually happened to Chile's aquaculture industry, way back in 2007.

Now maybe unsurprisingly, a company's license to run its facility is contingent on the incidence of disease in pests being at acceptable levels. But to do that, we're back into a question of trade-offs, where the use of things like antibiotics can inadvertently exacerbate antimicrobial resistance in the surrounding ecosystem, which is a very bad thing. So aquaculture is actually a careful balancing act between internal system requirements and the interaction with the surrounding environment. And that idea is not necessarily anything new, what is new and what is changing is the increase in commercialization of aquaculture. The emergence of specific markets and companies as a growing human population looks to increase the productivity of our food sources.

**Mike Disabato:**

So global fish consumption grew by an average of 3.1% per year from 1961 to 2017. That's more than any other animal protein, that includes meat, dairy, milk, anything. And that increase was about 178 million metric tons of production of fish that are valued around USD 401 billion in 2018. So that's a lot of money and that's a lot of fish. Recently we've had this situation where a majority of the fish that humans consume has switched to being aquaculture. Around 52% of the human consumption of fish in 2018, which is the latest data we have available, was aquaculture.

You could break it up into regions, Asia is the major producer of aquaculture. They farm the most fish by millions of tons, but they're very unique in that it's mostly small farm holders. Where you see some of the bigger companies that we cover, you see them in Norway, Chile, Canada, Japan and then a couple places in India and South Africa. That is not indicative of the market overall, that's just indicative of the companies that are traded publicly and the companies that we cover. And what you're thinking about mostly is salmon, rainbow trout, bluefin tuna and of course shrimp. Those are some of the main, money making fish out there that are farmed using these giant companies that both farm the fish, they harvest the fish and then they package the fish.

**Bentley Kaplan:**

Right. So as the aquaculture industry has evolved, we've ended up with a dichotomy, where a hefty portion of the world's aquaculture comes from countries in Asia, farmed predominantly in smaller operations. For investors, interest would instead be directed towards regions like Canada, Norway and Japan, where big public companies run large scale aquaculture. And it's in these large scale operations that Mike concentrated a lot of his research to figure out what risks aquaculture poses, not only to the surrounding environment, but to the operation itself. So the last thing I wanted to figure out from Mike was given these careful balancing acts in the industry, in the context of a growing population that needs more food, what's an investor to do? What's a practical way to navigate the industry? And at least a starting point in understanding the companies and countries involved?

**Mike Disabato:**

So we looked at a bunch of facilities in Norway, in Chile, in Canada and then in China. All of them require license to operate, all of them have either annual or semi-annual facility audit requirements, but some are specified, it's specific, some are not. Norway and Canada have very specific facility audit requirements, Chile and China do not. But they also have biomass limitations and they have waste discharge requirements in every single region. Some aren't specified, some are. And so that's something to really watch, where the facilities are, what kind of policies does the company have for dealing with things like chemical usage, water displacement?

So you might be thinking, "Well, I'm an investor, I can't go look at every facility in every location of the company that I'm investing in." Well, the good thing is that there're certifications that are in the aquaculture industry that people can look at. There's the Aquaculture Stewardship Council, ASC, there's the Best Aquaculture Practices, BAP, and then there's a GlobalGAP. And we looked at the companies in our aquaculture universe to see what percentage of their operations were certified by

one or more of either ASC, BAP or GlobalGAP. And we found that less than half, 35% of aquaculture companies in our coverage, certified more than 60% of their operations. So again, that's less than half, that have more than half of their operations actually certified to the specifications of these very important sustainable certification organizations.

**Bentley Kaplan:**

Right. So as our first segment highlights, the aquaculture industry holds promise, a way to potentially increase food supplies for a growing global population. And while companies might look to capitalize on this opportunity, it's not without risk. Trying to get to the bottom of that risk for an industry or a company is probably on the checklist for most, if not all investors. And our next segment is going to explore how companies communicate their risk and the role of regulators in overseeing that disclosure. Because most public companies are compelled by market regulations to disclose the risks that their businesses face so that investors can make better informed decisions. The Securities and Exchange Commission or SEC mandates disclosure in several forms. The one you're probably most familiar with is the 10-K, which is reported annually. Critical semantics here, the 10-K is an annual report, but it's not always the annual report.

In many cases, a company will release a parallel annual report, Capital A, Capital R, alongside their mandatory 10-K. This annual report also goes by names like Corporate Responsibility Report or Sustainability Report. Now, as an analyst that's waited through a fair amount of company disclosure, I can vouch for the soothing experience of paging through a company's voluntary annual report. For starters, design teams have a field day in annual reports, the infographics are slick and you're treated to regular pictures of happy but responsible employees and things like landscapes or cool technology. By contrast, the 10-K is mostly limited to black, white, gray and a gentle blue. But if, like my kids rifling through the books on my bedside table, you're looking for pictures, you are going to feel disappointed and betrayed.

And don't take that the wrong way, in no way am I knocking the 10-K. It is a key disclosure for investors and much of it has to do with the fact that there is a consistent structure and reporting is mandatory. Which means you can pick up any 10-K and generally know what sections will be in there, across different companies and in different years. As the SEC puts it, "There is a lot of overlap in the requirements for the 10-K and the annual report to shareholders." But there are also important differences, the 10-K typically includes more detailed information than the annual report to shareholders. The annual report to shareholders, unlike the 10-K, sometimes appears as a colorful, glossy publication. That reference to more detailed information is part of the reason why at least six companies have received letters from the SEC this year, as reported in an article by Bloomberg Law. The list of companies includes Diamondback Energy, Murphy Oil Corp, Corning Inc, American Axle & Manufacturing and Polaris Inc.

And to be clear, these letters do not suggest any kind of wrongdoing by the companies, instead, the SEC's essentially asking them to clarify differences in what's being reported in their mandatory 10-Ks versus their glossy annual reports. In some cases it's because these companies disclosed less information in their 10-Ks, including on things like carbon emissions and risk stemming from a low carbon transition. And we could go through each letter and each company response, but I know that your time is precious. So in the segment, I thought it would be interesting to focus on the example of Polaris. For those of you already familiar with the company, Polaris is not necessarily a name you might associate with the world's biggest emitters or those most reliant on a carbon intensive economy. But as climate risks intensify, we might see regulatory interest expanding beyond the front

lines of fossil fuels. To dig a little deeper into the SEC's letter to Polaris, I called up Helen Marlow out of our London office for her debut on the show. First, Helen broke down the company's business model.

**Helen Marlow:**

Polaris is mainly known for being a leading US snowmobile maker, but not only, the company designs and manufactures a wide range of outdoor recreational vehicles, so things like ATVs, but also motorcycles and boats. So what happened is that the SEC sent letter to Polaris requesting more information about its ESG reporting in its 10-K, which didn't seem to entirely align with what it was saying in its corporate responsibility report. This is interesting because primary related disclosures are not yet mandatory by the SEC, so the fact that they're picking up these inconsistencies is showing a lot more scrutiny is taking place.

**Bentley Kaplan:**

Right. So Polaris basically sells vehicles for adventure, snowmobiles, boats, quad bikes, scramblers, pretty much all the toys you need for the next 007 movie. And when you're having that kind of fun, maybe climate change is not one of the first things that you're thinking of. Now, in their 10-K filed with the SEC this year, Polaris did mention climate change in the operational risk section. In this context, they talk about the physical effects of climate change posing a risk to their business. Basically, if there are changes in things like the volume and timing of snowfall, rainfall and wildfires, its customers might be less keen for their usual adventures and therefore less inclined to buy Polaris' products. And then under the market and competitive risk section, Polaris goes on to mention that the company's competitiveness might be impacted if they can't execute on their electrification strategy. Which basically means offering electric versions of their adventure vehicles and boats.

By contrast and what the SEC pointed out is that in the company's corporate responsibility report, there's a lot more disclosure on the company's efforts to reduce its emissions as well as reporting on emission intensities and reduction targets. And at face value, that makes sense, there are a lot of investors who are interested to understand how effectively any company is preparing for a transition to a low carbon economy. And many companies would've reported fairly similar detail to Polaris in the annual reports. How successfully they've reduced emissions and what they're planning to do in future about it. But for Polaris and the products it manufactures, this question of a low carbon strategy is not an easy one to answer.

**Helen Marlow:**

Polaris is quite a niche example, being essentially considered a leisure product. So it's perhaps not subject to as much scrutiny or as much regulation as other industries or an auto maker. That being said, it does have an electrification strategy in place. In 2021, it launched its first electric vehicle, an all-electric ranger, but challenges remain. A lot of these vehicles are used in remote areas such as mountains, so there might not be the appropriate infrastructure in place, such as charging stations. Also, technological challenges, how quickly can you develop these new products? That's partly why the SEC where it's requiring clarification on a strategy, Polaris argues that they see it more as an

innovation risk and that means not being able to keep up with customer demand and operating in a relatively competitive environment.

**Bentley Kaplan:**

Right. So in May this year, the SEC asked Polaris, why they had disclosed more emissions related data in the corporate responsibility report than in their 10-K? In June, the company came back effectively saying that their annual report provides data to, "Address evolving stakeholder expectations even when such information is not material under the Federal Securities Laws." The SEC also asked the company to clarify why it had not provided more detail on its electrification strategy, which appeared to be in response to transition risk or future proofing the company if there is a shift to a low carbon economy. As Helen pointed out, Polaris' response to this was quite interesting. And that the company said electric vehicles were a question of competition and innovation, not necessarily climate. They acknowledge that even though some consumer demand might be driven by climate considerations, the company viewed its electrification strategy as a response to a competitive market and not transition risk, which is definitely food for thought.

**Bentley Kaplan:**

The SEC's interest in Polaris and the other companies it sent letters to may in part be because as a regulator, one role of the SEC is to help investors receive information they need to make informed investment decisions. And seeing potentially different signals coming from a company's 10-K and its corporate responsibility report runs a little counter to that, with or without the glossy pictures. But this also comes at a very interesting time as the regulator solicits feedback from multiple stakeholders, including companies themselves about climate risk and whether or not different climate related risks should be considered material.

Well, that brings us to the back end of the show. It has been an enjoyable week for me, a bit of a treat to be able to push Mike onto the other side of the recording studio just for a change. And as Mike alluded to, aquaculture seems to hold an interesting symbiosis between its regulators and companies, as both sets of stakeholders essentially target sustainable production. An industry where limiting interaction with the surrounding natural ecosystem is not only beneficial to those ecosystems, but often to the fish and shrimp that are being farmed. And in many ways, Polaris doesn't seem to be sitting on the opposite side of the table to its regulator, the SEC. But what might seem like semantics on where exactly a specific phrase should feature in a company's 10-K, does belie a much hefty debate about how companies view their own climate related risks and how exactly they determine the materiality of those risks.

And that is it for the week. A massive thanks to Mike and Helen for their take on the news with an ESG twist. As always, thank you very much for tuning in. Don't forget to rate and review the show wherever you're listening, any feedback is great, it helps us to get better, to get you what you really want to hear. Mike will be back again with you next week and until then, take care of yourselves and all the special people around you.

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