

OPIS Transcript feat. Eron and Nick

Jessica: Welcome to the OPIS Crash Course. I'm your host, Jessica Nesterak. With sustained record high global temperatures, and the effects of climate change continuing to take its toll on world economies, governments have come together to develop methods to reduce carbon emissions. One key method is to put a price on the carbon emissions themselves, forcing companies that pollute to pay the price for doing so. That creates an incentive to become more energy efficient and green up production. Carbon pricing platforms such as emissions trading systems have become a growing choice in the market. They were a recommended market mechanism in the 2015 Paris Agreement, and 57 countries and states currently employ such systems. That's up 34% from 2017.

Joining the Crash Course today is Eron Bloomgarden, a partner at Climate Finance Partners, where he advises on climate investment solutions. Eron is a professor of sustainable finance at Columbia University's Earth Institute, and was previously a member of the World Economic Forum's Global Agenda Council on Biodiversity and Natural Capital. He also served on the Board of Directors of the Environmental Markets Association. Also joining us is Nick Godec, a project manager on IHS Markit's Index team, covering the firm's tradable indices. I will note that IHS Markit is OPIS' parent company. Gentlemen, welcome to the podcast.

Eron: Thanks a lot, Jessica. It's a pleasure to be here. And to note, I'm a big fan of the Crash Course in general.

Nick: Thanks for having me. Pleasure to be here.

Jessica: So, to start with, Eron, what is a carbon credit?

Eron: So, putting a price on carbon is generally viewed by economists and practitioners as perhaps the single most important and effective thing that we can do to address climate change. By putting a price on carbon it changes the incentives throughout the whole economy. So, it makes green investments more attractive, and can really drive the change that we need. And so, price on carbon can really come in two different forms. It can come through a carbon tax, or it can come from a market mechanism. And, it's in this latter, in the market mechanism, where we find carbon credits.

So basically a carbon credit refers to a new type of commodity, which is essentially a permit that can be used by companies, organizations, or in some cases individuals, that designated a reduction of climate pollution, or the

allowance to produce a certain amount of climate emissions. And so, there are really two types of carbon credits, allowances and offsets. An allowance is used in regulated carbon markets, typically in cap and trade system, where there is a defined cap or ceiling on climate pollution that then typically goes down over time.

And in order to enforce this ceiling on pollution, the regulator, for example the EPA, or in California, the Air Resources Board, creates a new type of credit, or a carbon allowance. And, that allowance must be purchased by all large emitters or polluters. And at the end of the year, these large emitters, for example large power plants or industrial companies, need to hand in to the regulator the same number of allowances equal to their, emissions. And so in this way, it's not voluntary. This is a regulated and in that way, we can be sure that pollution is then capped and it's reduced over time.

There is a second type of carbon credit, which is typically referred to as a carbon offset. And that typically designates a reduction in carbon emissions that would go beyond what would have happened in a business-as-usual scenario.

Jessica: So, maybe it would be something that somebody could then tout as keeping their carbon footprint low. Is it something like that?

Eron: Yeah. So, carbon offsets designates a reduction in emissions. And, it's called an offset because by definition it happens outside the cap. And so, for example protecting forests, which aren't regulated in a cap and trade system. And so, these offset credits, and depending on the type of credit, can sometimes be used in a regulated cap and trade system, used by those big emitters as part of their compliance obligation. Or, you know, many of our listeners may have heard about voluntary use of carbon offsets, by either companies or individuals that are looking to reduce their climate impact.

Jessica: A carbon credit, an offset, or an allowance, is this something that someone listening to this podcast today could actually invest in, Eron?

Eron: Historically, it's been not easy to invest in carbon credit or in climate markets. These are typically regulated markets, and you know, very hard to access. Having said that, we at Climate Finance Partners have teamed up with a group called Krane Funds Advisors to offer a new ETF that will be benchmarked to IHS Markit's Global Carbon Index. And, the idea here is essentially to create the first global carbon price, if you will, that will be listed on the New York Stock Exchange. And, what that will do is it will combine the three largest carbon markets, which are found in Europe, California, and then

northeast regional market in the United States called Reggie, or RGGI. And so, that ETF provides a way for investors to invest in the global carbon price.

Jessica: So, practically speaking, if somebody's interested in investing, where should they look?

Eron: The ETF will go by the ticker KRBN. And, if anyone wants more information, they can check out KFAFunds.com.

Jessica: Eron, you just mentioned the IHS Markit Global Carbon Index. Nick, what is that? And how does that work?

Nick: The IHS Markit Global Carbon Index is an index that's meant to track the total return performance of the most liquid tradable global carbon markets. And, as Eron mentioned, right now those most liquid emissions trading systems are European Union allowances, California carbon allowances, and greenhouse gas initiatives. We have a look-back rule that requires any credit that qualifies for inclusion have a minimum monthly volume of 10 million that's traded, which these credits are all well above that. But, it's just a quantitative criteria that we use to ensure tradability on the underlying, since our goal with the index is to develop a tradable product. So, to that end, we were thrilled to come together with Climate Finance Partners and KraneShares to partner to work on this index to underlie the fund that they are shortly launching.

Jessica: Why does investing in a carbon credit market make sense for an investor? Is there a particular case for that point of view, Eron?

Eron: You know, these carbon markets have been around for quite some time now. New York's market goes back nearly 10 years. California also for many years, as well as the northeast regional market. And, they exhibit some interesting dynamics. As I mentioned earlier, the whole premise here is to drive incentives to reduce climate pollution. And so, the price needs to be at a certain level. And so, what we've seen is these regulators in fact have created a price floor, if you will. In Europe, they do it by controlling the supply. In California, they do it by creating a reserve price on the auction. And that's done to keep the price above a certain level so that it actually is driving types of investments in kind of the green economy that we need. So, it's quite interesting that it has this sort of floor trajectory.

Then, but if you look at the index now, which is a sort of blended price of these three markets, it's currently between say \$15 to \$20 per ton of carbon emissions. But, if you look at where the UN and other science-based bodies are suggesting that, in order to reach a safe climate outcome over the next 10 years,

the price needs to reach at least \$100 per ton. So, if the global community is going to meet the Paris Climate Accords, if we're going to reach a safe climate outcome, this price really needs to go up over time.

So look, we think both from an investment perspective and from an environmental perspective, there is a real opportunity here for carbon emissions as an investable asset class. You know, we think there is different types of investors that would be interested, from ESG investors, to the institutional investors, to investors looking to manage risk.

Jessica: How does investing in a market like this really help get that price up, and to help fight climate change?

Eron: First and foremost, it's important that there is a price on carbon. The dream of any economist here would be to have a single global price on carbon. If you have a single global price on carbon, everyone who is making an economic decision can look at that price and say, "Do I invest in emission reductions, or am I able to buy carbon credit?" And, it informs both short-term, but even more importantly long-term investment decisions. Because, oftentimes capital expenditure decisions are made and we're locking in these capital assets for 10, 15, maybe in the case of power plants, 30 to 50 years. And so, if we know, if there is a signal that there is a carbon price, we can make more sustainable investment decisions that will be with us for quite some time.

And so, we think it's really important to signal to the financial community that there is a carbon price. And, there is a carbon price that you can look at on the New York Stock Exchange that's quoted. And this, we should mention will be the first carbon ETF listed in the United States. Much more practically, look, investing in this market, the underlying is actually in fact the carbon allowance itself. And so, we're creating additional demand in these markets, and we're basically creating some maturity in these markets to increase the liquidity and make them sort of function more efficiently.

Jessica: Staying with that idea of the underlying index, Nick, I have a question for you with two parts. When IHS Markit designed its index, how did they take into consideration both the investment case and that larger environmental impact?

Nick: From the investment case perspective, we really designed the index to be diversified. So, to that end, there are regional caps on the index, such that no region can have more than a 65% weight at the index rebalancing. And, any emissions trading system that qualifies is going to have a minimum 10% weight. And, that's to equalize for some of the size differences that naturally

exist in this market, to really make sure that it's capturing a broad perspective, and that no single asset really outweighs within the index.

And, in terms of the investment results that we observe, Eron listed out some really nice fundamental value propositions with where the World Bank for instance sees the price. When we just look at the index data, we also see sharp ratios that are higher than other traditional assets such as stocks, bonds, also oil and a basket of commodities. And, what's further is that historical correlations are actually very low. For example, over the history of the index, the Global Carbon Index correlation to the S&P 500 is only 8%. To oil, it's under 10%. And, to high-yield bonds, it's around 12%. So, the feature of this low correlation means that by including this asset within a broader portfolio, you can actually achieve more optimal portfolios, so greater return per level of risk, through the inclusion of this asset class.

Jessica: How about the aims toward climate change?

Nick: So, Eron really spelled it out very well around bringing additional demand and liquidity to these credits, which really what they do is they add a cost that greenhouse gas emitters face. And, by adding to their cost basis, it changes their incentives. It shifts them away from either emitting, or making sure that they change their production process to greener production, which is why this type of mechanism, tradable carbon credits, is one of the recommended procedures in the Paris Agreement.

Jessica: So, just to finish up, how do you see the carbon market evolving? Where do you see future growth stemming from as we look ahead? Eron, let me start with you.

Eron: Specifically, I think you had referenced a few statistics around carbon pricing. I mean, we have seen carbon pricing expanding quite rapidly over the last 5 to 10 years. And, I think the index that covers the largest and three most liquid and the ones that have been around for the longest. But, we're seeing a lot of movement in several other countries and regions, and across industries. So, the airline industry will over the next year be implementing a carbon price with a market mechanism.

Jessica: CORSIA, I believe that is.

Eron: Exactly. New Zealand has a carbon price that they've implemented for several years. Korea has a growing carbon market. The biggest step change will be China. And so, China over the last several years has had about seven regional markets at the city level. They are now looking at how they expand

that at a national level. When that's fully implemented, that market could be the largest carbon market in the world, you know, larger than Europe and certainly larger than California or northeast regional market.

So, I think we should mention that the index was designed such that it would bring in these markets once they reach certain liquidity thresholds. I do want to just mention something around a broader point about the expansion of carbon pricing, in the context around the current crisis that we're facing around the pandemic. After we get through the pandemic, climate change is potentially a far larger crisis, and one that we can't self isolate from. We really need to think about how we come out of the current crisis. And, it's a huge opportunity when we move into the recovery phase of the COVID crisis, to really think about how we build a green and sustainable economy. And, carbon pricing can be really an important tool in that, both by creating the right incentives to invest in green growth. But also, quite frankly just practically speaking, it is an interesting way for the public sector to replenish their coffers as they've been injecting all this stimulus money. And so, we think that carbon pricing can play a really important role in this green growth recovery from the COVID crisis.

Jessica: Nick, where do you see that green growth impacting IHS Markit's index?

Nick: So, just based on the numbers that you cited at the beginning, just given the trajectory of carbon credit pricing being adopted by more and more countries and regulatory programs, from our perspective what we have done with the index is design it in such a way to make sure that it's adaptable to that growth. And to that end, the index is governed by an index advisory committee, which as part of that committee are various market experts, Eron included, who we worked with to develop the index. And so, what that committee does is offer a forum to provide input to basically keep on the pulse of the market as it develops so that we can be ready to expand the index coverage as the markets evolve and become suitable for inclusion. And to that end, I would just ask to any listeners that see themselves as a potential stakeholder in the fund or in the index, we would love to hear from you and have you be a part of the discussion, which will be ongoing and developing.

Jessica: For more on the carbon market, and to connect to IHS Markit's Global Carbon Index, please visit www.ihsmarkit.com/globalcarbonindex. Please do note that Markit is spelled M-A-R-K-I-T. Changes in the fuel market due to environmental initiatives is a subject that we revisit often on the OPIS Crash Course. So, make sure you subscribe wherever you connect. And while you're there, give us a shout in the comments box. That's it for the Crash Course today. Talk to you soon.

