Transcription

M'aAM - Rijuta Dey

[00:00:00]

Jennifer Betts: Welcome to *Metals and Advanced Manufacturing*. We have an incredible guest who has actually crossed over one of the very select few guests who has crossed over from *Betts on the Future* over to the *Metals and Advanced Manufacturing* world. It's because she has an incredible background in the metals industry and is on the forefront of a particular area of the industry, the green steel movement.

We have Rijuta Dey. She is a senior steel reporter at FastMarkets and her team has launched green steel prices in the US this year after a successful rollout in Europe and Asia, the industry has not yet settled on a definition of what is green steel and FastMarkets hopes to be a part of that solution.

Also green steel won't stay confined to a single flat rolled product like green rebar, green plate, et cetera. They're on the horizon for the industry. Green steel is more of a movement than a [00:01:00] material. And so I want to welcome Rijuta Dey for hopping on to *Metals and Advanced Manufacturing* podcast, because we are going to be talking about everything that contributes to technological advancements and metals, covering everything from AI to raw materials, to manufacturing and to decarbonization, which leads me into green steel.

So Rijuta, thank you so much for hopping on. It's pretty great to see you again, uh, especially since I actually just saw you, um, spoiler alert, uh, for those that are listening, a little hint to when we're recording this a couple of weeks ago in Pittsburgh, Steel Capital USA.

Rijuta Dey: Hi Jennifer, very happy to be here and to be talking about all the exciting things that are happening in the decarbonization efforts for the steel industry.

Jennifer Betts: Well, uh, thank you so much for hopping back on here. For those who may not be, you know, [00:02:00] in the metals world, maybe they're more on the manufacturing side or maybe they're just curious about what's happening in this world. Why should we be talking about steel, decarbonization, anything along those lines?

Rijuta Dey: I was at a climate week NYC last week and, um, there were people from all over all over the world and across different industries, and somebody actually stopped me in the elevator and said, "How can you decarbonize steel?"

When I told him that I'm here to cover green steel and decarbonization in the steel industry, and it was a very complex question, and I did not have enough time in the 10 seconds that you and the elevator together to, you know, give a convincing answer to the answer. Very skeptical man, uh, who asked me that question. Well, steel is a carbon product, right? [00:03:00] Uh, and it is, um, one of the, uh, you know, one of the, uh, heavy industries, um, which is responsible for carbon, uh, high carbon emissions in the world. I am genuinely shocked and surprised by how fast the uptake of carbon is. Of this movement has been in the US because even three, four years ago, this kind of attention, this kind of, uh, you know, thought and, uh, this kind of, um, money was not involved in the decarbonization process. Um, it is not something that companies are doing just to, uh, tick a box. Because as reporters, we are generally quite skeptical, uh, uh, you know, about companies per se, and it is [00:04:00] something that, you know, since I began reporting on this industry, I have seen companies take various routes and make various efforts to, you know, reduce their carbon emissions impact.

That said, there is no. consensus on what is green. Uh, there, there is definite, there is definite like understanding of what is lower carbon, lower carbon is whatever is the baseline going lower than that. Uh, fast markets as a price reporting agency, we began publishing green steel premiums in Europe and Asia. Uh, and we launched, uh, green steel, premiums in the US This year. It's just different in the US Because the rest of the world is heavily weighted towards blast furnace [00:05:00] production and blast furnace production is it's increasing in the world as the demand for steel increases. The US is heavily weighted towards electric arc furnace production, more than 70 percent of production as people in the industry know, but we do have, uh, you know, two remaining integrated producers, uh, who are also taking efforts. Uh, to lower their carbon emissions across different, um, different, uh, uh, plants and different products. So we want to be a part of that conversation because we, uh, fast markets, I, I feel, and my team, uh, led by our editor, uh, Daniel Hilliard, and my fellow senior reporter, Alicia Alkaff, they are doing a tremendous job of talking to consumers, stakeholders across the chain in trying to determine what is that green steel premium, because we know that big, [00:06:00] big consumers want to pay more.

But at the distributor level, I have, I've spoken to some people as recently as

after attending Climate Week NYC, where I was telling them about what I had learned and what kind of, you know, conversations we were having with stakeholders. And they were like, some of them were like, we don't care if it's like 50 more expensive. I don't think my customers would want to take it, but at least the customers are having that kind of conversation right now where they are inquiring about it. Uh, the distributors tell me that the, uh, the, the push for. Green Steel Premium is very much product related. So for those OEMs, um, original equipment manufacturers who supply to the electrical vehicle industry or those kind of, you know, industries, uh, uh, be it, uh, renewable energy, those specific end markets, they will demand. A lower, [00:07:00] uh, lower carbon emissions product. So the kind of skepticism that I've been seeing from the buyer's side, it's still there, it's heavily there, but, uh, the price is a factor. Therefore, we are trying to find that premium. We're trying to get that one answer, which has been quite, um, complicated because as, because of the different modes of production in our country, we are not able to come to one consensus and we hope to be part of the solution there.

Jennifer Betts: And for those that are listening, I do want to make a, and a little note on this podcast. We are going to get a little technical, but we are also going to clarify for those that are listening, the acronyms, the, the behind the scenes of how we manufacture the global perspective so that you can follow along because, you know, to your point.

It is about [00:08:00] education for the consumers that they understand that there are options for them so that they can relay that to their end consumer that they do have the ability to choose. And that, in my opinion, is really going to help solidify the green steel premium. Because when you take a look at other industries, I think about REI, for instance.

I'm going on a personal trip that requires a lot of products and a lot of their products have recycled content in them and they're more. Expensive, typically, and their consumers tend to pay more for that. I remember there was a quote, I believe, at the World Steel Dynamics Conference, I believe, earlier this year from a CEO that [00:09:00] talked about the correlation between organics and higher prices.

Rijuta Dey: I think so, yeah. The one in June, right? Yeah.

Jennifer Betts: Right. Yes. Where if consumers are aware that there's an option for a lower carbon footprint, especially for younger generations that might be more inclined to be more earth centric or more environmentally conscious, I

should say. They might be more inclined to pay for that particular product along those lines.

So, I do want to take a step back and on the blast furnace side versus EAF, if you're not a steelmaker by trade, Uh, the blast furnace is essentially a way to make steel from scratch. It involves essentially mining iron ore [00:10:00] from the ground and taking a relatively long process to get it from the ground all the way into finished steel.

And then there's the EAF, the electric arc furnace that essentially takes a large furnace. Remelt the steel and then turns it into a new product. And so that's essentially the two different ways that you have steel that's being manufactured around the world. And the United States has the majority of its steel industry set up from a recycled EAF standpoint, and we can go into why that is.

In a little bit. And the balance of the world from a global perspective is actually from an integrated blast furnace standpoint. And there are reasons for that as well. Um, but that's kind of just a little behind the scenes of why there's a little bit of a discrepancy between EDFs domestically and integrated around the world.[00:11:00] Yeah.

Rijuta Dey: Yeah. It's, uh, you know, the US is an advanced economy. There is a lot of scrap that is generated here, which is not so in the rest of the world, right? So that's the reason why you know, we're able to feed the mills with the scrap they require. And if you have gone to any scrap conference, it has always been a panel discussion topic that is there enough scrap? Will there be enough scrap? That's been going on for years. Yeah, the two modes of the production, uh, but I see what the integrated people are saying that, you know, you cannot leave us out of the conversation just because, you know, we don't produce steel the way you do, which is, you know, at the outset, cleaner than ours, you know, at the outset, it's cleaner, but we are still steelmakers and if we want to, if we want to, uh, truly, truly, you know, uh, make progress [00:12:00] towards getting towards net zero, you. Or, you know, uh, reducing our carbon impact significantly. You have to take both, but the EF producers, they're like, why we are already so much better. And, and we are like putting more money into our processes to become. Even, even cleaner. So why should we? So that is, that is one of, I feel that's one of the reasons why we are not able to like come to a consensus, uh, about what is green, how green, my green is better than your green, that kind of, uh, debate.

Yes. But much of it, I think also comes from government incentive, government funding, uh, federal money. Uh, you know, um, the by clean initiative. So many

of the, the, uh, the federal bills that say, Hey, if, if you're going to get money from the government, make sure it's the, the, the steel is [00:13:00] better than what was coming before that also, that, that propels the movement forward. And the Biden administration has done a lot. In that direction, and one of the stories that we have recently covered is what will happen. Uh, after the elections, because there are two candidates and they're going to take some different steps, you know, uh, we know what President Trump's stance on climate change has been, and we can see what the Biden administration has done in that regard. Both the administrations are quite, uh, aligned on the tariffs portion of it, though. They want to protect the steel industry and maintain, uh, its place as the country with the highest steel prices in the world. So both of the, both, both the candidates will be the same. In that sense, [00:14:00] but in terms of climate change policies.

Yeah, we need to see what will happen. And we have a pretty good idea of what the two different candidates will do if one of them comes to power over the other. But for now, a lot of buyers are also motivated by that. Because the government is saying that, you know, uh, we will fund your project or we'll give part of, you know, part of the funding if, uh, you, you buy better steel. Uh, also the Department of Energy, uh, If you remember, uh, the news came out last week or the news cycle is so intense was last week that Cleveland Cliffs said that their middle town, uh, you know, uh, part of the money has come come down for their, uh, for their, uh, you know, uh, decarbonization project there. So the United States government is also doing their part. Uh, [00:15:00] and they, maybe they will do more as they should be doing now because climate change is a very real threat. Uh, we're not, I do not think anybody believes we are acting fast enough. So these are very urgent, uh, and very real conversations and, um, steps that are being taken right now. And I'm, I'm glad, like, even as a business reporter, I'm glad to be reporting on this. It is, it is quite, quite important.

Jennifer Betts: And you're reporting on a very large, impactful industry to that global climate change aspect, the numbers tend to vary depending on which metrics you, you take a look at, but it's anywhere from 8 to 9%, sometimes 10%, depending on which, again, source you're looking at, in terms of 11 percent as well, right? Yeah, sometimes [00:16:00] up to 11 percent depending on if we're like really in demand with steel products. In terms of steel being that percentage of global carbon emissions, like just full tenth percentage of the global carbon emissions. Annually and not to knock plastics. Okay. They've, they've got some issues as well.

It's been very interesting when I go to sustainability conferences or, I see posts online or read articles, you know, on the sustainability movement. And we're talking about industries that have obviously, you know, one or 2 percent issues, or I see a lot of VC money or private equity money that go towards important causes. But when you take a grand scale macro perspective, the [00:17:00] steel industry has a pretty impactful large scale take on the global carbon emissions and yet not many from the public are probably super aware of that. And I think that plays into your comment about the adaptation, not scaling quick, quick enough from the consumers not getting that green steel premium. You know, latching on from the consumers quick enough because then that would also play into more investments from the steel mills, probably more investments maybe backing from the government, help in, I should say government. It's not just us in the United States. Okay, we are the fourth largest steel producing country in the world, but there are other countries out there as [00:18:00] well that produce steel

So, there are a lot of initiatives that could be taken in this area that getting some cool technology. There are some investments starting to come into this place. You are starting to see some billionaires like Bill Gates starting to shift their focus and realize that this is a major factor. But again, you're not really seeing the masses being aware of this. And I think that would be a very pivotal moment for this industry once that happens.

Rijuta Dey: Yeah, that's the thing. The news about, you know, oh, this big company is going to buy, uh, uh, you know, 40 percent lower embodied carbon products. It's lost on all the press releases that business reporters pick up. How many people are reading it, you know? People should be reading it. It should be covered more in general media, uh, because, uh, you know, [00:19:00] FastMarkets is a, it's a price supporting agency. So we are, we are talking very specifically to the people in the metals industry, in our, uh, you know, particular sectors. And, uh, I can, I can understand why that man in Climate Week NYC was so skeptic when I told him that I'm here to cover green steelings, like. Can you? I was like, actually, yes. Uh, yes, that, that's something which, you know, is not part of a larger conversation. People do focus on fossil fuels, um, uh, you know, greenhouse gas emissions. Uh, and yes, the world is not the United States, but United States is the most powerful country in the world and many people want to sell to the US. Right. And there's also talks that, you know, if you want to sell to us, you have to meet a threshold. We're not going to buy dirty steel, [00:20:00] though we know people circumventing that. But, uh, you know, that's, uh, you know, when you, when, uh, the US sets a standard, it is a standard for, uh, you know, other, other countries to follow that said, um, uh, European countries, especially Nordic countries are quite different. Quite ahead in this path of decarbonization as a culture They are very very invested in that

last week I interviewed the CFO of of a stainless steel company based in Finland He was talking about how he's able to sell his Green stainless stainless steel products more easily to customers in Europe than customers in the US Because of the price sensitivity, uh, you know, component. So that is something real when I'm, when I'm, uh, talking to producers, they do say that, you know, a lot of, a lot of customers say we, [00:21:00] we do want to, we do want to, you know, buy better. But I don't know how many of them are necessarily ready to pay a higher price and just for, uh, you know, uh, clarity when fast markets are saying we want to price green steel are, uh, methodology is up on the website and it's 1.7, uh, you know, uh, tons of carbon dioxide for per metric ton of steel produced. And that does not include carbon offsets. Yes. Which is one of the you know, methods that some steel producers take, which we are not including in, in our green steel, uh, uh, specification,

Jennifer Betts: which I do want to talk about that briefly, the carbon offsets. Can you explain just real quickly what a carbon [00:22:00] offset is for those who may not be aware of what a carbon offset is

Rijuta Dey: generally not talking about the steel industry. Generally a company can purchase carbon offsets from companies that have created the system where you can give some money and say, hey, I might be polluting over here, but I have paid the money over there. So therefore I am leveling it out.

Jennifer Betts: You know, you're basically paying to encourage green practices, more or less, in another area. And balancing the books. Yes.

Rijuta Dey: You know, that's, I mean, that's, that's my personal take on it. I do not want to say that [00:23:00] this is like, you know, my company's take on it, but that's my take on it. When I read about carbon offsets in the world in general, like, you know, billionaires who take private jets and then they buy carbon offsets. Yeah, it's, I mean, you still have emitted that much carbon and you are paying money to feel less guilty about it or posture about it. So as opposed to actually investing in technology that takes years to build, takes a lot of money and manpower and all that to give results. That is different. Uh, so therefore, that's one of the reasons we did not include carbon offsets in our methodology in the US. Uh, but it's not possible everywhere. It's not possible everywhere.

Also, it's not really comparing, you know, uh, apples to apples when we say that we have a green steel [00:24:00] premium in Europe. We have a green steel

premium in Asia because of the differences in methods of production in these three distinct regions. So the US price is new. It was launched this year. We are really trying very hard to come to a place where we can provide a simple one number, which is harder than you think it is because of all the reasons I have, uh, you know, because all the reasons I have mentioned, uh, uh, steel producers in the US themselves, they're not in agreement with who is green, why, who, how green, all that.

Jennifer Betts: Yes. And, and it's kind of interesting because in one of your articles that you know, I read recently you laid out the difference between the top four steel [00:25:00] producers in the United States and the ranges that they have in terms of what their, their carbon, um, Emissions per, yeah, and impact is per ton. And, you know, I'm a little biased. I'm an ex Nucor employee. So I actually was a little surprised to be honest, to see that they actually did not have the absolute lowest on that list. Now they are still pretty, pretty low. I think they were second lowest on that front. Um, but steel dynamics was,

Rijuta Dey: They have the lowest in the country. Yeah. After all the consolidation we've had in the industry, we are left with big four, right? And I know the story you're talking about. Let me just pull this up over here. Yes. [00:26:00] Um, yeah, uh, Alicia, my brilliant, uh, you know, colleague wrote this, uh, story. Uh, this is, this is a way for the government to assess who is where. So this is regarding, this was a story we wrote, uh, regarding, uh, Biden administration's Buy Clean initiative and the Buy Clean California Act. And the gist of the story was that buyers are being resistant to paying a premium. And in this, uh, this is where a lot of acronyms are going to come up. Uh, the BICLEAN initiative, uh, you know, it uses EPDs, which is Environmental Product Declarations to determine compliance with GWP limits.

GWP stands for Global Warming Potential Limits. by the, uh, State's Department of General Services. Um, and this is specific to California, right? Um, [00:27:00] then, uh, and yeah, I'll just quickly read out, you know, what's, uh, maybe, yeah, maybe I shouldn't be reading this out, but basically, you know, uh, new course EPD lists is, uh, average GWP as, GWP 100 as 1.24, and between its five hot rolled coil producing locations, the GDP 100 ranges, uh, approximately 1.03 to 1.58. Which is pretty low, you know, and then, uh, US Steel's, uh, GWP 100 ranges from 1.17 at Big River, which is, uh, their mini mill, uh, subsidiary, which got, uh, Irresponsible Steel certification last week.

Uh, and, uh, and, and that goes up to 2.22 at Mon Valley Works. which is their older legacy asset. Um, Cleveland Cliffs production weight average is 2.10. Its facilities range from 1.87 to 2.25. [00:28:00] And SDI, Steel Dynamics, their

available EPDs show GWP 100 values ranging from 1.01 to 1.21. It was very interesting for me as a reporter to see that comparison and be able to compare like that, though, I'm sure the different steelmakers will not be happy with that.

Okay, because again, you're comparing different modes of production, different, you know, facilities. And how do we come to like one, one, uh, you know, consensus, the fact that, you know, uh, responsible steel is seen as a, uh, as a standard for integrated producers and the EF producers have their own standards, uh, as you know, the, the GSCC, which was the global steel climate council. Yeah. Um, [00:29:00] And they say, you know, basically it's backed by the EF producers and they say, Hey, we are already starting off at a higher point, uh, than, uh, the other, other, uh, other kind of production. So we should be judged on our own merit. So yeah, it's, it's thorny, but I think, I think, you know, uh, if somebody wants to standardize it and, you know, basically be able to answer in one sentence, what is green steel premium? I hope, I think we can, we can get there.

Jennifer Betts: Yes. I mean, it, it is a challenge. Um, you know, the industry is at least taking a look at it. You know, to go back to your earlier statement about how the industry has really shifted in the past three to four [00:30:00] years. I've been in the industry a couple decades and if you had talked about green steel, even five or ten years ago, like, you would have just been laughed at, or probably eye rolled, or, you know, we're not talking about this, to, it really feels like all of a sudden there's been this huge shift, where there has been Mm hmm. A really serious take on it. Investments have been made. You reference the Middletown Works. I mean, that, that's going to be a billion plus investment in Middletown, Ohio for Cleveland Cliffs. That is going to be huge for that upgraded facility if they so choose to do it, because I think they recently just said. Maybe pause on that, but then, [00:31:00] but then they said, no, we'll do it. Maybe we're going to come back, you know, back and forth, um, on that one, because I mean, it is a huge investment for them to do that. And so, but even the fact that they even considered it and that they're going through with it and they're taking a look at it is huge.

Rijuta Dey: Absolutely. Um, I think, um, Cliff's a CEO, um, and Lorenzo Goncalves. He gave an interview to Politico where he said that he's, uh, he's finding that his buyers are resistant to a green steel premium, which is why that news came out that maybe they will pause it because they were not able to. I found that interesting because I know from my own reporting and the reporting that my team does, there is resistance and the resistance is because of the, uh, the price premium.

[00:32:00] **Jennifer Betts:** Which is somewhat odd when you think about, and I'm going to kind of pick on Cleveland Cliffs here, what products they produce and where it goes into. Like, for instance, Cleveland Cliffs produces material that goes into the EV. Industry in particular, right?

Rijuta Dey: The EV market is not that big. That's the thing. It's going to grow bigger, but, um, it's not that big, but yeah, it is something that like, you know, gets a lot of, uh, news share, but the market is not growing at the rate that people had thought it would. It is still like, you know, the general automotive industry that, you know, the Cliffs is applying to. So I think I, if I remember his interview correctly, He said that, you know, his auto customers are pushing back on like being a premium

Jennifer Betts: for sure. Well, I mean steel prices over the past three or four years have really shot up. [00:33:00] So I mean if I was an auto manufacturer I'd probably not happy about steel prices either over the past three to four years.

Rijuta Dey: It's been pretty sad. The prices have come down and have remained down. So that is something, uh, you know, we are not going to be seeing a hundred dollar per hundred weight steel price again, unless there's another massive black swan event, like the pandemic, it had gone up to 98.25 in 2021. And now we are somewhere between. We are somewhere at like 36. So it's down by a third. And that's where generally steel prices were before all this like, like 40, 50, you know, it had never gone up 98.25. That was just an unnatural thing that happened. But steel prices have softened across the board this year because of softening demand. Demand is not that [00:34:00] good. Producers are not able to push through the kind of price increases that they have previously in the last few years because they're not sticking because the buyers are not ready to pay higher than what they think they should be paying.

Jennifer Betts: Yeah. I mean, the price of cars, it didn't fall when steel prices dropped. Automakers content. Um, I mean, it's. It's hard to justify, you know, paying more for a vehicle when, you know, wages and things like that haven't necessarily kept up with the rise of those costs of large purchases. So it's understandable to see that pushback from consumers. So until you start seeing those wages increased, yeah, it's a little hard for consumers to justify the additional costs on that front. It doesn't mean that the consumers wouldn't want to see. The additional green steel coming into their products, it just, maybe they're not willing [00:35:00] to pay just yet for that. Unless it becomes

Rijuta Dey: something like, you know, uh, like a carbon tax by the government or something. Unless it becomes, unless, I'm just thinking out loud now, you know, if the government is like, you know what, if you will buy this kind of steel, I'll give you some tax breaks or something like that. That can be a motivating factor. I feel just on the price point. Yeah,

Jennifer Betts: well, look at the EVs and the hybrids, the government gives tax incentives to the first X number of cars that are sold, like the people that buy them for each new iteration, or maybe it's the for the car company, it's something along those lines. Why can't some of that be tied to the manufacturer purchasing? Greener products that make up the raw materials for those. [00:36:00] greener actual products, right? Like it does seem a little bit like an oxymoron if you are making quote air quotes greener products, the government is giving huge subsidies for these quote greener products. And yet you're using dirtier materials to build these greener products like seems. Like the ROI on that the break even point from like the carbon perspective seems a little questionable when you have a steel industry domestically that has 70 plus percentage producing it. Um, you know, from a very, you know, you know, good, greener, better than the

Rijuta Dey: rest of the world, better

Jennifer Betts: than the rest of the world is,

Rijuta Dey: Yes, exactly. There was something interesting, uh, uh, that, you know, I, [00:37:00] reported on last week, again, from Climate Week NYC. Somebody from Mahindra Group, which is this, uh, humongous Indian conglomerate, uh, she was there at one of the panels, which I forget the name of the panel, and she was saying if, so this is an Indian manufacturer, right? And they are buying a lot of steel for their car manufacture, manufacturing. They make tractors, all kinds of, you know, vehicles. And she said, If I can get my suppliers to go from 2.2, uh, tons of carbon, uh, produced for, uh, per ton of steel to just two, that is a win for us. So she did not use the word green steel. She said green steel is not yet possible for us, but lower carbon emission steel.

Yes, it's possible. So, you know.[00:38:00] I can see why some US buyers are like, why do you want us to pay more? We are already cleaner. We are already better. Look at some, like many people do say, look at China, look at India. So, which are, you know, different, different, um, producing countries, but yes, they are also adding to. The carbon emissions of the world. So if a big company like Mahindra says, you know, we are forcing our, we are forcing our suppliers,

domestic steel suppliers to reduce their carbon impact by this much, that will make a difference. Every step will make a difference.

Jennifer Betts: Lead by example, right? Lead by example, right? Instead of just. You know, oh, well, what about them? No lead by example, right? We have some of the best technology available to us in the steel making industry here, and we've. actually pulled some of the best technology [00:39:00] from Europe and around the world and have started utilizing it or plan to utilize it in some of the areas domestically, right? We do have the money to do that, right? And the government support for it, lead by example, right?

Rijuta Dey: Also, there was, there was, uh, David Burett, uh, US Steel CEO at Climate Week NYC, where he made a very specific point that if Nippon Steel, is successful in acquiring, uh, US steel, they would decarbonizing their legacy assets. And he made a very specific point about that. It was during the panel in which Responsible Steel conferred upon Big River Steel their certificate. Uh, and the point was, you know, Nippon Steel's R& D budget Is, uh, multiple times bigger [00:40:00] than, uh, the domestic steelmakers of the US and if we can import that technology and have Nippon's money coming and making our steel better and greener, why is there resistance to it? That is also something, you know, that was brought up.

Jennifer Betts: A hundred percent, which by the way, I'm going back to your, um, uh, colleague's article, US Steel, which you referenced the CEO's comments right there, has the, let's see here, has one of, not the highest on the range, but one of the higher, um, GWP's on here. Um, that one is facilities. Yes. Yes, because they do have those legacy facilities. And when I say legacy facilities, it's because they are traditionally an integrated blast furnace based. Um, uh, spoiler alert. If you go into their history, they were started by, um, uh, Andrew Carnegie, um, and some [00:41:00] other, you know, names that you would recognize from, you know, your history books because they have been around for so long. Um, hence the name United States Steel Corporation, right? But because of that, they do have some assets on their books that are in desperate need for some major capital intensive upgrades that currently they really honestly don't have the capital to do.

Rijuta Dey: Yes, this is that. We don't have the money to do it ourselves.

Jennifer Betts: We don't have that kind of money. They don't. And Nippon is based in Japan. And Japan, I believe, is the third largest steel producing country in the world. It's up there. I think it's we tend to be right up there with them, um, but they have technology in the R&D to take what is a [00:42:00] rusting, pun

intended, right? And really invest in it to take it to the next level. But, I mean, it would be huge. Think about the jobs, the technology, the people that are there. I mean, yeah.

Rijuta Dey: Decompilization also helps in these other lateral ways, right? Like if you are infusing money into an economy, it creates jobs. There are these other benefits of putting money. In this, in this, uh, in this process. And just today, US Steel came out with this press release saying, uh, you know, if, uh, if the sale goes through and Mon Valley gets the money that Nippon has promised it'll get, then it'll create, like, almost a billion dollar, uh, increment in, you know, the total, uh, [00:43:00] investment in that area of, um, Pennsylvania. Yeah. And yeah. So just today that, yeah, that a press release came in and I had spoken to somebody a couple of weeks ago when I was in Pittsburgh and he said, uh, he's talking to a lot of labor unions, which is not just the USW, but other labor unions, they are looking forward to the money coming in, uh, because it'll create jobs.

You know, it's just not good for the, uh, the health of our only planet, you know, but also it will create jobs, this new money infusion. And, uh, also Cleveland Cliffs, if people don't know it's, it was. It went from a raw material supplier to becoming the biggest natural producer because they bought up a bunch of, uh, Plants from AK Steel, you know, those plants are old, you know, so therefore, you know, that, uh, [00:44:00] the, the money that the. Uh, the company is getting for modernizing its plants. Cleveland's, uh, Cleveland Clips themselves, they've been doing hydrogen injections, uh, you know, amping up DRI, all that this, it's a multi pronged approach. The US, uh, industry overall is doing a lot of different things, uh, to, to, you know, move forward in the path of decarbonization.

Jennifer Betts: If the US deal and Nippon's deal goes through, it would be an incredible case study in terms of turning a company around. From a decarbonization standpoint, from a green steel premium standpoint that could be used to showcase in other parts of the world, because to your context point in India, for instance, India is pretty much blast furnaces.

Rijuta Dey: [00:45:00] Yeah. Yeah.

Jennifer Betts: And they've got some aging assets there as well, um, as well as some newer ones, but it would be an opportunity to take a look at what works, what didn't work at us steel, when Nippon invested. And be able to use that, learn from that. And it's a win-win for everyone from a global perspective, because the, again, the industry, eight, nine, 10, sometimes 11 percent global

carbon emissions could be reduced from this giant learning opportunity from a technology standpoint to take these assets that have been around for decades that need to be updated. Right. Yeah. And those are expensive.

Rijuta Dey: Yeah, it's expensive. You have to, if you want to upgrade an existing you know, dinosaur which still runs very well, you know nice [00:46:00] dinosaur, but you need money you need money, which uh see, I've been covering the US steel thing ever since it, since it happened last summer, you know, the news came out uh, everybody agrees most people, I cannot say everybody most people agree that it makes sense Economically, it makes sense on paper, but it has run into so many impediments. Otherwise, it has become a pawn of politics in an election year. We are in an election year. So that, that is the reason, that is one of the main reasons why, you know, that the, the, the deal completion is facing so many hurdles. But yes, David Bure did make that point very categorically that if Nippon, um, succeeds in buying us, we'll have money. To decarbonize more money than we have right now.

Jennifer Betts: Agreed. And I just want to, um, make one little point. [00:47:00] Maybe we'll cut this out depending on, you know, um, your editor's approval. From a national security standpoint, on the US Steel, Nippon Steel standpoint, have y'all ever met a steel worker, right? If it's truly about a national security standpoint. And people are worried that Nippon Steel, a Japanese based company, would shut the plants down. And a national security standpoint, when we say that, we're talking about going to war and we need to produce steel. Y'all really don't think that United States based steel workers would not show up to that plant or those plants to make steel in that situation? Just saying.

Rijuta Dey: Uh, the USW, uh, the United Steel Workers, uh, labor Union, their main contention is that [00:48:00] we won't be dealing with Neon Steel directly. We'll be dealing with a subsidiary of this, which has been their contention. So even though Nippon is saying, we will not lay off anyone, we will not close anything. And the USW is like, oh, but they're gonna move all our production to Big River Steel. If you follow the, the, all the, you know, they're going to shut down our legacy plants, uh, because they want to move all our production to Big River Steel. And Nippon is saying the opposite. US Steel is saying the opposite, that no, we will, in fact, invest money in Mon Valley and other, uh, legacy assets. Uh, that's the point they are stuck on, that we do not believe you when you say that you will not fire us. You will not shut down the plants. We do not believe you. And, uh, the breakdown in communication between the, uh, labor union and the [00:49:00] other top executives of the two companies is the reason why a lot of this problem is persisting. Anybody else I've spoken to says this makes so much sense.

US Steel has been struggling for so long, you know, of all the producers, they are the most hobbled, um, uh, in terms of, I mean, till US Steel bought Big River Steel, which was the shiniest, newest steel company ever, and this, you know, 123 year old company bought, uh, this shiny new company and made them a subsidiary. Those numbers would have been much higher if Big River Steel was not in the, in the, you know, in the mix there. Yeah. Uh, so definitely, you know, that, that was a good business move from US Steel's part that they got Big River Steel. This like, you know, highly automated electric arc furnace, their doubling [00:50:00] capacity, all that at Big River. But Nippon, Nippon Steel has specifically mentioned that we will not close any of those legacy assets, and we will not lay off anybody. That's what they're saying. So the national security thing, it is disingenuous at best, but hey, I'm not the CFIUS, so.

Jennifer Betts: Which, by the way, they already, for those who are unaware, Nippon Steel already operates in the United States already. They already have, what, like 600 employees already within the United States. So where was this when they were

Rijuta Dey: It's an election year, Jennifer. That's where we are.

Jennifer Betts: Yes, we're almost over. We're almost over, which by the way, when this episode comes out, maybe we'll know who won, who didn't win, um, along those lines. Right. Um, [00:51:00] you know, I, I do want to get, before we go, I do want to get to, to one last, um, article, uh, just because it came out this week on the consumer side of things, uh, the Amazon, the Johnson article that talked about their commitment to buying 2 million tons of, how, how should I say, um, Because it's, you know, I'm going to air quote green steel. Um, but is

Rijuta Dey: it, this is something, this is something quite exciting. Just one second. Let me pull up the story. It's a platform. It's called the sustainable steel buyers platform. And it was, uh, uh, you know, uh, pushed by this, uh, [00:52:00] clean energy think tank during Climate Week NYC, uh, Rocky Mountain Institute, RMI. They are saying that they could see a collective order of 2 million short tons of green steel from major companies, right? And a lot of big companies, uh, are associated with this. It's really exciting for us. To be honest, um, uh, so the companies include, uh, Microsoft, there's a solar hardware producer, next tracker, there's a real estate, uh, company, Trammell company. Uh, so it's them together, uh, which they say that they will buy the near net zero emission steel by, via RMI's platform. This is new.

Uh, I'm going to be following, I'm going to be following this story and seeing how much of this. How this pans out. I mean, I'm excited to see this, you know, because they're saying, Hey, actually you want green steel, come to us. And [00:53:00] apparently they have sent out, uh, you know, um, they're in touch with, uh, the domestic steel producers. Uh, so that process is already working. And, um, I'm, I'm excited to see where this goes, because this is, this is a new kind of announcement, like these kind of announcements. This is, this is quite new and the fact that they launched it in climate week, NYC was, was quite, uh, you know, impactful in that sense, timely, impactful, all that.

Jennifer Betts: Well, and I think it also showcases that there is demand out there for this type of product. I think it shows that there will be and has been, but there will be a greater demand for. The green steel premium that consumers will be paying for it. You're essentially seeing on a public platform, if you will, companies saying, I [00:54:00] want this and I want you to buy

Rijuta Dey: it, but when will they buy it? How much will they buy? Yes.

Jennifer Betts: Well, yeah. What was it like 20, 28? I think they specified in there. So it was, it wasn't necessarily. Right. Well,

Rijuta Dey: That's cool. I think it's cool. You know, my black heart is not being like,

Jennifer Betts: Yeah, it's a step in the right direction. Yes, exactly. Um, well, I just want to say we're due today. Thank you so much for, for hopping on this, the *Metals and Advanced Manufacturing* podcast. It's been a pleasure. We definitely geeked out a little bit on the steel, the green steel, the, the global industry from that perspective, [00:55:00] before we go, is there anything else that you wanted to touch on before we say goodbye until next time?

Rijuta Dey: Well, thank you for having me. It's a lot of fun to like geek out with you, talk all these acronyms and what they mean. Uh, yes, I think we are going in the right direction as an industry. And I'm not a steel producer. I'm not a steel buyer. I just write about the industry, but we are in that position. My company is in that position where we can. Lend to the conversation. We want to be a tool that the, that the industry can use in terms of determining. What is green steel and how much of a premium there should be? Are people going to start paying it? Are they already paying it? All that. So, we as a team are quite excited to find out where that will lead us.

[00:56:00] Because I know my reporter colleagues in Europe and Asia they're already like, you know, reporting on it. They already are recording that premium. So I want to see how and when that happens in the United States.

Jennifer Betts: Well, the best way to get ahold of you is LinkedIn. Find you via. Okay. So LinkedIn, we're due today. Find her on LinkedIn. She's from FastMarkets. You can contact her there. We'll put the information down in the. Podcast information notes on this episode. Again, thank you so much. It's been wonderful, and hopefully by the time this episode comes out, we have some more wonderful news from these articles that things have been progressing a little bit more on, on the green steel front. So again, thank you so much for, for hopping on.

Rijuta Dey: Thank you, Jennifer.