Canada’s Clean Hydrogen Tax Credit: Opportunities And Challenges For Project Development And Financing (Podcast)

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In this episode of *Clean Incentives*, host Brendan Sigalet unpacks the opportunities and challenges of Canada’s Clean Hydrogen Tax Credit with Bennett Jones partners Geoff Stenger and Yannick Beaudion. Together, they explore how this tax incentive can fuel major clean energy projects, the critical role of investment tax credits in securing financing and key strategies businesses need to succeed when tapping into these incentives.

Transcript

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If you went to a bank and said, hey, I think my project's gonna cost me a billion dollars, and you have a cost reimbursable deal and no project certainty, and it's very early engineering work done, and you have a cost estimate of, you know, plus or minus 30 or 40%, you know, I think a bank's gonna tell to get lost.

Brendan Sigalet: [00:00:36] Welcome to clean Incentives. A podcast series within the Bennett Jones Business Law Talks podcast that discusses topics around taxation incentives for developing clean technology projects in Canada. I'm Brendan Sigalet, a tax associate at Bennett Jones, and my practice focuses on the tax aspects of energy transition deals, including renewable energy, carbon capture and hydrogen projects.

Today, we're focusing on a clean hydrogen tax credit in Canada and the larger development projects that might arise from the opportunities this tax credit provides. This tax credit represents one of many incentives that is helping push Canada toward a greener, more sustainable energy future. But what does it mean for companies in the hydrogen space, for companies looking to develop in this space? How can companies leverage this credit to support their clean energy initiatives and what challenges might they face in the process?

Before we begin this podcast, please note that anything said or discussed on this podcast does not constitute legal advice. Always seek proper advice from your legal advisor as every situation is different and outcomes can vary. Before we look at some of these challenges and opportunities, let's first discuss what the Clean Hydrogen Tax Credit is.

So the Clean Hydrogen Tax Credit or the Clean Hydrogen ITC, it's a tiered tax credit for companies based on the environmental impact of their hydrogen production projects. Basically, the cleaner your hydrogen, the higher the tax credit that you'll receive, it's divided into three tiers or

three different percentages of ITC that you can receive.

The top percentage is 40 percent for projects producing hydrogen with a carbon intensity, which is the measure they use to determine how clean your hydrogen is. The carbon intensity for that level is 0.75 kilograms, carbon dioxide per kilogram of hydrogen produced or lower. The next tier is 25 percent tax credit.

That's for projects with a carbon intensity between 0.75 and 2. And the third tier is 15 percent. And that's for projects with a carbon intensity between 2 and 4 carbon dioxide per kilo hydrogen produced. So carbon intensity is basically, as mentioned, it's the measure that they use to determine how clean the hydrogen is that's being produced, and it measures the total carbon emissions from a project, including upstream sources like the electricity used.

For example, if you rely on electricity from a carbon heavy grid, like, say, Alberta, that will affect your project's carbon intensity. Businesses need to calculate their carbon intensity using a government tool called the Fuel Life Cycle Assessment Model. For a lot of these projects, they rely on electricity in order to produce the hydrogen.

So if a project uses electricity that they get from wind or solar, emissions from those sources count towards the project's overall carbon intensity. In regions like Alberta, where the grid electricity is more carbon intensive, then you can actually enter into what's called a power purchase agreement with renewable energy providers in order to provide the electricity for the hydrogen plant, and that will count towards your carbon intensity.

One key thing to note with respect to this is that in order for the power purchase agreement to be valid under the legislation, the electricity that you're purchasing has to be new capacity electricity that's been developed since November

3, 2022, and so this is another way that they're incentivizing further clean energy development through this tax credit.

There is only two main pathways currently that are allowed for producing clean hydrogen and receiving this clean hydrogen ITC under the legislation. The hydrogen can be produced either through water electrolysis, which is using electricity to split water into hydrogen and oxygen. Obviously, that is a very electricity intensive process, and so the grid emissions, if you are relying on grid electricity, is going to heavily influence the carbon intensity of your project using this process.

And then the second pathway is reforming or partially oxidizing eligible hydrocarbons, like natural gas, with the caveat that CO2 is captured using the carbon capture utilization and storage equipment or CCUS equipment. And so that's your general steam methane reforming. You are producing hydrogen by splitting methane.

As far as the eligibility for this tax credit, only taxable Canadian corporations are eligible, uh, similar to other clean economy ITCs that we've discussed, although they can claim the credit through partnerships as with other clean economy ITCs. Another thing to note is that in addition to the clean hydrogen equipment being eligible for tax credit, The tiered tax credit clean ammonia generation equipment is also eligible for a 15 percent tax credit.

This is a recognition by finance that oftentimes hydrogen is difficult to transport on its own. And it's safer to transport that hydrogen by converting it to ammonia, which then can be converted back to hydrogen at the end stage. And so this clean ammonia generation equipment will also be eligible for a 15 percent tax credit under the clean hydrogen legislative framework.

And the qualification there is that the hydrogen must be

produced by a project that is a clean hydrogen project. So there's a number of different compliance and reporting obligations associated with this tax credit, as with other clean economy tax credits. Companies need to submit a sub project plan detailing their expected carbon intensity for the project period, which is defined as 20 years under the legislation.

That plan must be validated by a qualified engineering firm. The carbon intensity calculation is very complicated and it relies on a model as discussed that was provided by the Government of Canada. Annual reports on the actual carbon intensity of the project have to be submitted for the first five years of the project as well.

And if the actual carbon intensity of the project exceeds the estimated carbon intensity by more than 0.5 kilos, carbon dioxide per kilo hydrogen, part of the tax credit may be clawed back. It is very technical. Determination as to what carbon intensity tier your project will fall into, and there will be a lot of engineering involved in getting your project plan together and getting everything all your ducks in a row in order to be able to claim this ITC for organizations looking to take advantage of this opportunity.

What are some of the legal and financial challenges? Joining me today on this episode are two of my senior partners here at Bennett Jones, who bring a wealth of experience and expertise in infrastructure, project development, and financing of these projects. Geoff Stenger, he's a partner in our Capital Projects group.

Geoff's experience includes the development of power generation, including natural gas, solar and wind power projects, pipeline, gas processing, storage, transmission, LNG, petrochemical, and refinery projects, along with a number of public infrastructure projects. Also joining us today is, uh, Yannick Beaudoin, uh, Yannick has 25 years of experience

in infrastructure and project development, project financing, banking and financial service, real estate and asset backed financing.

He’s acted for clients in Quebec, across Canada and internationally in a wide range of high profile complex and leading edge projects. Basically, he’s the guy who’s going to get you the money in order to build these projects. And so welcome to the show, both of you. Thanks. Thanks so much for joining us.

Geoff Stenger: [00:08:45] Thanks, Brendan. Happy to be here.

Brendan Sigalet: [00:08:47] So maybe Yannick, we’ll, we’ll start with you.

Yannick Beaudoin: [00:08:51] So Brendan, let me, let me start with probably the, the fundamental and the principle, make sure that everybody that are listening to us have the, the base, the base case, um, and understanding of, of what we’re going to talk about.

So. You know, project finance transaction are typically financing large and costly thing widget plans, and therefore, until it’s very commoditized, you will go in trying to finance. Your plant, your project, and moving along with hurdles, an issue that you have to be creative in order to find a solution. And so this is, we’re embarking on an additional cash flow, trying to finance ITC and trying to find a way to make it work for the lender or group of lender that will be financing that cash flow all the while trying to finance the rest of the project.

And therefore, of course. You know, you can do it on your balance sheet, in which case good for you, in which case the solution will be easy. You have one or two lender that will be financing that ITC cash flow, and you’ll be moving along as if you’re, you’re financing your project on your balance sheet, but that’s the rare and successful developer sponsor.

And that’s, that’s certainly not, uh, the, the bulk of the transaction that we’ll be working on at first principle project finance tries to achieve the best leverage with limited recourse, understanding that the asset until it’s operating as little value because it’s a work in construction, subject to completion.

And therefore, you need to get to operation in order to generate a cash flow and the lender will be focused on ensuring that technically the project can be completed and that ultimately during operation, there will be a revenue. As per the base case and the financial model that will generate the cash flow necessary to reimburse this in your debt and from an equity perspective, you want to return.

You want to return that makes sense for you to embark and to invest your money and therefore to the extent that you can leverage as much as possible the project without providing recourse to the lender, that will provide the best use of equity, ultimately putting the equity in order to make to improve the construction, improve the timeline, get that equipment that you need. That’s really the goal that project finance provide to the sponsor and developer.

Brendan Sigalet: [00:11:34] Just to back up a little bit. Um, with respect to actually financing, you know, potentially off of these investment tax credits, is there any kind of history to, you know, as far as, you know, lending solutions based on that kind of asset that’s going to, you know, occur in the future that we would love to.

Yannick Beaudoin: [00:11:55] There’s two similar programs, I would say, class of asset or cash flow that works currently in the market. So, in Canada, this is a new program for the Canadian market. So, in the US, they’ve been living with that type of financing, uh, tax credit, advanced financing concept for a while. And, they have done it successfully for a few years.

So there's, there's a few manners that you can finance those tax credits, either through straightforward bank financing or providing insurance. We'll talk about that a bit later, but the program is a bit different than what the Canadian government has introduced. You can actually sell the tax credit. In the US and monetize the value of that tax credit or the excess portion, if you cannot fully use the tax refund, uh, whereby in Canada as of now, uh, that's not the case. The market has, is more robust and has lived through that program for a few years, and therefore, there's consultants that have emerged and that have created a business out of that, and therefore, you'll know going in, with a fair amount of certainty, what will be the estimated amount that will come out and that will be paid out to you here with the Canadian government and the new program, it's, it's a bit uncertain still, and therefore, we're embarking on something where the only equivalent would be like the R and D tax incentive where that has been going on for a few years.

There is historical data. Going in, you'll know how much will be cut. You have consultants that will tell you this, this invoice or this cost, this expense. Yeah, maybe 50/50, that you'll be, you'll be reimbursed for that. But at least there's a program and there's historical data that will allow you to know how much you're going to get back, and therefore, people will finance it.

Brendan Sigalet: [00:13:52] Yeah, it's interesting when we go to you to determine the SHRED program as a potential view into what this will eventually look like. SHRED tax credits are also tax credits on the Income Tax Act that you get for scientific development. And so you mentioned haircut, um, so, you know, what do you mean by the haircut that you'll take is, they'll only lend a certain amount as compared to the value or the face value of the particular credit in question.

Yannick Beaudoin: [00:14:23] Exactly. Unless you have credit enhancement somewhere down the line, they will not provide you

with 100 percent financing of the estimated amount. Um, for instance, in Quebec, you can add investment Quebec as a credit enhancement. They'll provide guarantee to your lender. And that will allow you to get 100 percent of the estimated amount of the refund.

But you'll have to provide a parent guarantee or a guarantee from the borrower in order to incentivize Epistemic Evict to provide that guarantee to your lender. And so without that credit enhancement, there will be a discount. Some will finance only 75 percent of the estimated amount. Some will go up to 85 percent.

But in all cases, most of the time, you'll have to provide guarantees or some sort of collateral support to convince your lender that they should be financing even up to a 75 percent or 85 percent home-to-value based on the estimated amount.

Brendan Sigalet: [00:15:25] So if you're expecting to get 100 of clean hydrogen ITC from your project, then that's going to be discounted essentially by any lender who's looking to take that back security on that ITC. Are there any challenges to actually taking security on something that's like a future obligation and can you do that? Or am I, do I have that wrong? Is it, you know, just a general obligation of the corporation to pay the lender for the amount that they're lending? Like, how does that exactly work as far as your experience in the shred world?

Yannick Beaudoin: [00:16:02] The tax statute, whether provincial or federal, provides for assignment and security on the tax credit or the tax refund, but, unfortunately, it's not binding on the, on the crown and it's subject to set off and therefore everybody will take security as a matter of fact, but if there's a default scenario, there's a garnishment or a seizure or whatever happens at the corporate level.

The expectation is that the crown will pay itself first and

also keep in mind that typically the borrower will have a line of credit or other secret creditor as part of its capital stack. And therefore, we'll have liens on the asset and cash is fungible. And so to the extent that the money cannot be deposited specifically to an account, which is block segregated, cash is fungible.

And therefore there is a risk that if you don't have anything done, backstop the payment obligation, somebody will scoop it. The company will, will be in default. And therefore the lender that financed specifically that tax credit may not have access to the collateral. And so there are ways to mitigate all of that in the US.

Again, the US has more robust rules on assignment and therefore that risk that I just mentioned is, I wouldn't say alleviated, but it's surely mitigated. Canada has not gone as far as of now. Maybe it's going to come in. But why would they do anything different than what they're doing for the research and development tax credit, for instance, and therefore you'd be you're going to be in a scenario where legislation says it's not opposable to us.

I still have my set off right. But, nonetheless, the market will develop, people will get more comfortable, there will be transactions that will close, and there will be comfort that the market will get, that the money will not be scooped out. If the fundamentals about the borrowers are still sound, and you've done your underwriting, and the company is still good for the next 18 months, ultimately the credit has been, is subject to a yearly renewal anyway, so you will get the reimbursement and that reimbursement will be applied to the debt.

If you're going in, this is, we're talking about a new program. We're talking about a cash intensive plan. We're talking about something that is challenging from a technical perspective going in. And therefore, I would expect a lender

will want to have more than simply comfort that the program will run, as would research and development programs work, and therefore you'll need to convince them to move away from a corporate guarantee.

Limited recourse project financing assumes there's an SPV right there. So right there, there's some structuring because the equipment has to go in the operating company. So right there, there's a bit of structuring that has to go in. If you cannot convince them to move away from the corporate guarantee, you need to provide them with other credit enhancement.

And the market has evolved. The US has moved in, you know, they're comfortable with the program in the US some participants are moving into Canada and looking to provide an alternative. As of now, the market is looking into ensuring the ultimate payment of the tax refund. And so, from a due diligence perspective, there are a few things that basically are, are important from either the underwriter, lender underwriter, or even the insurance company.

Brendan Sigalet: [00:19:28] You're just talking about tax insurance there potentially on these ITCs, and do you anticipate that becoming a requirement in order to get kind of this higher loan to value that you're looking for on these ITCs?

Yannick Beaudoin: [00:19:43] Until something else comes up in terms of credit enhancement, I don't see a lender going in without a corporate guarantee.

So if you're not willing, if your balance sheet is already stretched because the project is requiring so much of your balance sheet for the other facilities that you're putting into, you're putting in place. If from a, a joint venture perspective, one of the partners does not have access to additional balance sheet.

And, you know, you might, you might be partnering with a major company that has the balance sheet to provide whatever is required to support the lending. But if you're the junior developer, and you don't have access to that, you will need to provide either insurance or credit enhancement. And I don't see a lender at this time with the novelty of the program going in without support.

Geoff Stenger: [00:20:34] Yeah, and Brendan, the only thing I might add to that, and Yannick, like your thoughts on this as well, this is more your world than mine, but when you're looking at it from a lender perspective, you're saying I'm only getting this when this project is finished. Right? And I only get security on getting repaid if this project gets finished.

So, what do I need to make sure I get then? Well, if I can't take security, or if some risk of taking security or set off, maybe I need this to be in a trust so I reduce the set off risk from the government, but I'm guessing they're going to be looking at trust-type scenarios to mitigate potentially some insolvency-type risks and holding ITCs in trust. They're going to be really keen on step-in rights to making sure they can actually cause the project to be completed. When you're looking at like a 40 percent of a material cost of a project, they're going to be very keen to know I can get in and actually finish that project. If it goes sideways, they're going to be looking at making sure the project plan is filed with the government, and can they get an advanced ruling to get some certainty that those ITCs will come when that project hits commercial operations, or in the tax year of commercial operations. And then, like Yannick said, they will also be looking, what insurance can I put in place that if something happens outside of my control, how can I help secure this? Because as you can imagine, 40 percent of these projects is a big, big number and, you know, having that much of the project kind of in the hands of a third party from a lender is a

little bit foreign. So they're going to try to take as much security as they can to make sure that actually gets across the finish line.

Brendan Sigalet: [00:22:01] No, that's a very good point. That's a good step. We're into generally from a project development, what kind of regulatory hurdles. And, uh, what kind of issues would, you know, project proponents be facing generally from a legal perspective in respect to getting these, uh, projects off the ground?

Geoff Stenger: [00:22:19] Well, I think, like, maybe I'll start with just looking at financing kind of in two phases, because that ties into how you get these projects off the ground conventional project financing is getting put in place at FID or, or final investment decision. And that's when a project has a lot of certainty. You have your offtake likely on board, which the lender is going to require on a hydrogen project.

Brendan Sigalet: [00:22:44] And what's, but just to back up, Geoff, what, what do you mean by offtake?

Geoff Stenger: [00:22:47] The, the offtake agreement being your sales contract. So whoever's buying the product to the hydrogen coming out of your facility, the lender's going to want to know, okay, what are your capital costs going into this project? So how much is it going to cost you to build this project? How much certainty do you have around the cost of building the project? Like, what's the margin of error on your capital costs? How much of that have you passed down to your contractor market? How much of the project is fixed? How much is variable? How do I get my head around knowing what the final cost of this project is?

And then once the lender has, you know, knowledge of the final cost of the project, they're going to look to say, what are your revenue expectations? How much money is coming in? So

when this project is done, what are you going to be generating as an operating entity to pay me back my loan? And as part of that, it's also going to be how much of the ITC is coming from the government.

So when you have conventional project financing coming in, it's often at a later stage of the development stage of the project when there's a lot of certainty and the lenders are pretty comfortable. But there's a, there's a big period of time in a project's development lifecycle before that happens, and that's starting, you know, when the project's a dream and an idea all the way through to getting an engineering contractor on board to do front-end engineering and design, starting your regulatory strategy, getting the permitting advanced, you know, having discussions with potential off-takers, getting your land secured everything to kind of advance the project through to a stage of getting enough certainty for when a lender can actually step in.

And as you can imagine on a major hydrogen project, the amount of cost it takes to advance a project to that stage are quite significant. And so that's where you start looking at, okay, how am I going to finance that? Is that through JV financing? Is that through balance sheet financing? Is that through government grants? Is that through some type of interim bridge financing?

But, you know, in that period of time, you're not going to have your, your kind of non-recourse project financing in place until the project gets a little bit more certain. So that's kind of a key stage gate is if you're going to be chasing a big hydrogen project, it's how do I get the money to develop this to a point in time where I get enough certainty to get more money and that more money being from either a bank through project financing or through further equity investments.

Brendan Sigalet: [00:25:01] And just generally, when you guys

are referring to project financing, are you referring to generally, you know, secured against the assets of the project sort of thing, or is it just secured against the entire project? Like, how does that all work?

Geoff Stenger: [00:25:13] Well, I'll maybe turn it over to Yannick. Can you talk about the bank financing more particularly? So that, you know, it's a good question, because when I'm saying project financing, I'm always thinking conventional like lending lenders coming in and financing a project, but project financing is really one of three things. And two are pretty similar, right? It's equity balance sheet financed off of balance sheet.

It's a joint venture coming together, and everyone's kind of pulling money together to get a project off the ground. And then it's some type of project financing, whether that's non-recourse or part of a general facility in place that a company draws on or raising money in the capital markets. But when I use the term project financing, I guess I'm always thinking bank money coming in the door.

Yannick Beaudoin: [00:25:56] It's going to be complicated for capital market bonds, uh, senior notes to come in at the early stage before creation is off the ground just because technically a hydrogen plant is so complicated and therefore they won't be able to get, you know, somebody sitting on their desk at the, you know, I'm either buying a bond for a hospital or a toll road or buying this thing. It's going to be complicated to get your head around the technical issue, and therefore most of them would be initially funded by banks.

Um, and therefore you could see kind of a short-term tranche where some bondholders would be willing to take the construction risk, but it will be the rare situation.

Brendan Sigalet: [00:26:34] And by construction risk, what do you mean by construction risk?

Yannick Beaudoin: [00:26:38] What's the collateral? Well, until the thing is built, there's not that much. It's a contractual, it's the offtaker, it's the performance security that your design builder is providing you. And in the current market, you're not getting as much as you used to.

It's the warranty that the manufacturer is providing to you for the equipment. So therefore, what you are to granting a security to collateral is a bundle of rights and contractual rights, because until the thing is off the ground, it's a construction financing. Ultimately, the foundation is done. You don't have anything.

And everything that you're putting in in terms of senior financing and equity is to construct your plant and, therefore, until it's done, somebody is stepping in, they need to complete the plant in order to get revenue and therefore project financing during that time is a bundle of rights that you're trying to finance.

And so that's why it's, it's so essential for a lender. Irrespective of, of their, whether it's capital, capital market or bank financing, it's so important that the project gets finished and I'm going to be stepping in and having to complete your plant if you're not able to do it. And therefore, I need access to your subcontractors.

I need access to the manufacturer. I need access to the equipment in order to make sure that this thing generates revenue at one point in time.

Brendan Sigalet: [00:28:08] Geoff, just turning to you, you had mentioned about the bank coming in with the final investment decision date. You know, it sounds like that's a little bit different than, you know, when this plant's actually built. But at that point, is there enough certainty in this bundle of rights that, uh, you know, Yannick's talked about where they'll come in and finance these things?

Geoff Stenger: [00:28:25] Well, that's what they're going to look at to say, if you want, if you want a dollar of my money, I need to know how my dollar is going to be spent. And I need to know that my dollar is going to be used to get me a project that's finished, because, like Yannick said, the project's not of any value to me if it's not finished.

And so I need to know if I'm going to commit a billion dollars of financing to cause this project to be completed. I need to know that it's going to be completed within a certain acceptable range of tolerance for total capital costs. And so if you went to a bank and said, hey, I think my project is going to cost me a billion dollars and you have a cost reimbursable deal and no project certainty.

And it's very early engineering work done. And you have a cost estimate of, you know, plus or minus 30 or 40 percent, I think a bank is going to tell you to get lost. You're not at the stage yet to develop your project, right? And so a bank, you know, conventional non-recourse financing at FID, bank's going to want to say, what does your EPC or your construction contracts look like? How much certainty do you have in there?

How much do I know that my dollar that I'm giving you is going to actually get a project done for a fixed price? And if it's not fixed, that's when lending gets a little more complicated in my experience, right? How do you actually get the project across the finish line if we can't give the lender as much certainty as to what the final costs are? And getting fixed price contracts in this market, especially for a large industrial hydrogen project, is, you know, a challenge to say the least.

We'll leave it at that. It's a really challenging market to get cost certainty, especially across the board on a project. And so, you know, it's going to take a little bit of time, kind of creative financing and understanding. How do we get the most cost certainty we can to get the money available to

actually develop this project.

And I think that's a big part of where these are coming in is to say, you know, you have that 40 percent of eligible costs coming in to kind of support part of the project. You know, part of that's going to be designed to bring the offtake costs down and provide a product that's competitive in the market that you can sell at a competitive under a competitive offtake. And also that, you know, there might be a little bit of variable cost risk on overruns as part of the ITC that a bank looks at.

So the point being, when you bring a project to a bank, the bank needs to know that it's properly thought through, contracted, and understood that you have enough certainty that what's going to get done is within a, within a cost range with an off-taker that's going to generate you a sufficient amount of revenue so that the bank's money is safe.

And when the bank looks at whether their money is safe, a big piece of that is also going to be, how do I know I actually get my hands on that ITC when this is finished?

And part of that analysis, and I mentioned this really briefly before, but as Yannick also said, is stepping in and making sure if I need to step in to make sure certain contracts get completed, I need to have the right rights to make sure that this project gets operational, that my money is spent to get a functioning operational asset, because a bunch of steel installed in the ground is of no value to me until that thing's finished.

Yannick Beaudoin: [00:31:35] So then Brendan, if we want to bring it back to ITC financing, ultimately, from a financial model perspective, you need to know whether or not that money will be available to you as an eligible taxpayer, whether you will have costs that will fit within the program. And once that has been determined, that determination can be done, of

course, by you.

Way before the final no-go on the investment decision. But once you have that determination, then you can determine whether or not it's financeable bankable and whether or not you can use the cash flow because you're giving credit enhancement or parent guarantee or, or an insurance to your lender, potential lender, and use that money that will come in 18 months, maybe 24 months.

We don't know yet the terms of payment that the federal government will have. So you'll have, you'll have that cash flow.

Brendan Sigalet: [00:32:28] Just generally, like it's generally the ITC is available when the project's available for use. So, you know, that's a, that's a variable term within the tax, uh, within the income tax act, but you can kind of ballpark it as to when the project's actually producing hydrogen.

Geoff Stenger: [00:32:46] If you look at the ITC, where that money comes in from the government, Brendan, as I understand it, in the tax year of when the project becomes available for use, which on a large hydrogen project, and you know, hydrogen projects can take various shapes and forms and sizes, right? But if you're talking to a big hydrogen project, you're looking at probably a two-year plus construction cycle, you know, potentially, and including, you know, depending on how long your initial development phase is, but just, just call it, you know, two years of construction for a large-scale hydrogen project.

And so if that's the case, you know, the bank is going to be looking out to say, okay, well you're asking me for a hundred dollars and your project costs, you know, call it 110, just using rough math, but you're going to be getting you know, 40 back at the end of this. So I'm financing on 110, but the

project, hopefully we get, we comes in at 70 when we get the, when the government's money back. So how do I get my hands on knowing that that 40 percent that is coming from the government in the tax year, when this project is operational, is going to ultimately be available to be paid to me or available to pay down my facility once the project's operational.

And so it's going to be a question of whether that money comes straight to the bank and just pays off part of the facility as soon as it comes in. And that kind of goes to my earlier question of, well, can you secure it? Do you hold it in trust? How do you structure it to make sure that that money, when it comes from the government to the SPV's bank account, it's available?

For the bank and that facility, that's going to be very, very key to any project. It's what I was saying earlier about, you know, how does the bank help ensure that that money is available, and that's, you know, through an insurance product, potentially through this project plan through getting some type of early determination from the government that the is going to be eligible and then also looking at your construction contracts to make sure that, you know, whatever the eligibility criteria are for labor for apprentices, um, that that's being complied with so that, you know, the receipt of the ITC isn't in jeopardy. You know, two or three years out whenever that money comes in the door from the government.

Brendan Sigalet: [00:35:02] Yeah. And so the longer time horizon, you know, that'll just be kind of baked in with the risk that the lender is going to, you know, to take into account when, when, when lending against that, you know, longer time horizon on a project, the higher degree of risk.

Geoff Stenger: [00:35:12] Yes, 100%.

Yannick Beaudoin: [00:35:18] And two things on that, Brendan.

So once that determination is made and you've convinced your lender, it will give you money that you can use now for the construction and the design, whatever costs you have at that time. So basically that window you have money in your pocket now to use the refund comes in two years from now 18 months from now but ultimately you can use it now and so from a cash perspective from a cash flow perspective it helps the project and therefore that's why the program will be useful for whoever is tight on the construction cost now because of the we just talked a bit about the clawback and the clawback risk now it was eligible.

You've convinced your lender to finance it, front the proceeds of its loan so that you can use that money. Ultimately, 18 months from now or 18 months from operation, the money will come in and the money will, will therefore be applied as a reduction of the facility of that lender. Will it be a syndicate of lender? Will it be the same syndicate of lender that's been financing the project? Maybe, maybe it's going to be a dedicated, dedicated lender just because the risk is so particular and nobody will want to take that risk except for a few. But then my point is because of the clawback risk, if you have a dedicated facility for that project or for that ITC, whether it's insured or not, whether it's another credit enhancement, you then have interesting, um, intercreditor issue because the clawback will mean I was expecting based on brand, uh, based on, on just, uh, example, I was expecting 40 the government giving me 32 and therefore the project is short eight. I have a cost overrun or I have a lack of cash flow of 8. Who's making that up? And from my perspective, from the lender's perspective, I got my refund. I was comfortable. I got credit enhancement. The full amount has been insured or I got my ITC or I got something else that allowed me to make sure that my full amount has been repaid to me.

I'm out the door. And therefore, the shortfall is for the remaining lenders to figure out with the borrower. And

therefore, that's going to be an interesting intercreditor issue because, you know, if I'm getting repaid and you're the one holding back, holding the bag for a clawback, then that's the lend, the syndicate of lender and therefore I haven't done the underwriting on the tax issue. I didn't want to finance it. I don't have the underwriting specialty to do that. Nonetheless, I'm holding the bag because the government applied a reduction on what had been expected in terms of estimated amount. And you think that insurance might be able to mitigate that risk? It becomes one of the only available products short of a balance sheet.

Brendan Sigalet: [00:38:13] Yeah, or alternatively, you know, in the syndication of lenders, you're just talking about, you're talking about different like tranches of lenders sort of thing. And so, you know, this guy's first access against the, you know, project, this guy's next access, the next, and then, you know, whoever's the most high risk is eventually going to hold.

Yannick Beaudoin: [00:38:31] Exactly. If you're not providing a full security to that ITC lender, and there's a clawback risk, the, the syndicate of lender will, will ask for reserves. They want to protect the lack of the shortfall. And if they put a reserve, then you don't have the full amount to apply to the project costs and therefore you still have a shortfall that you have to figure out at one point in time.

Brendan Sigalet: [00:38:52] Yeah, I just, I just want to go to, uh, just kind of turn more to the project development side of things. All this, uh, ITC is based off your expenditures in the project, right? It's based off your capital expenditures that are eligible for the clean hydrogen ITC. Um, and Geoff, you were talking about having, you know, cost certainty as far as what these projects are actually going to, uh, to get a cost at the day, how, how do you actually go about, you know, ensuring from a legal perspective that you have to the extent you can cost certainty in these projects, you know,

particularly, you know, with all the different variables that are involved in, in actually getting a big project like this built.

Geoff Stenger: [00:39:30] It's the flavor of the day. It's, it's how do you get cost certainty on these big projects right now, where you have a lot of cost tensions on a project right now. So coming out of a very high inflationary period, which was making it very difficult for like legitimately very difficult for contractors to be able to say on a long term project, how do I get cost certainty where.

You know, we had a bubble of a lot of inflation and now that's come down quite significantly and then who knows what the next six months look like. And so it's really hard for, for contractors to say with certainty, you know, what are my costs going to look like? And then, you know, even look at some of the labor pools and, and you'd have been reading in the news about renegotiations of collective agreements and salary changes with different groups of people and how that's becoming a little bit more contentious. And so then your labor pool is a little bit of risk too for how you get cost certainty on labor.

Brendan Sigalet: [00:40:28] On the labor point, you know, obviously these ITCs are also subject to the prevailing wage and apprenticeship requirements with that also kind of play into this whole, you know, issue with respect to the project proponents trying to get cost certainty and, and building these projects, if you have to pay this prevailing wage, which, you know, it started certain jurisdictions is inflated.

Geoff Stenger: [00:40:50] Yeah, it depends on. What collective agreements are in place at what points in time and up for discussion, but you got to think about that as a contractor is can, can I lock in my labor pool? And if so, how long? And if I can't, how do I hedge that outside of that locked in period? Do I have some idea of what rates are going to cost where I

can fix price that and take some risk with an owner? Or do I need a, do I need a reopener on that, depending on the time period of your project and when it's being developed, you take that from a, from a contractor's perspective where it's more challenging for contractors to price projects today than it might've been. You know, 10 years ago and from an owner's perspective, they're thinking I'm building a hydrogen project.

I need as much cost certainty as possible. I need, I need to get project financing. I need a bank on board. A bank's not going to give me a lot of money unless they have certainty as to what this is going to cost and you know, I, I need, I need to know how much my ITC that I'm going to get at the end of the day.

So you, you bring all these factors together and that's where it gets quite challenging from a development perspective is. How do you bring enough to the table to give some cost certainty where it's not just a, hey, contractor, go start work tomorrow and two and a half years later, tell me what the project costs like that's not going to get you banks money right?

That might have, that might have built you an oil sands project 10 years ago where it's all off the balance sheet and there's lots of uh, market pressures to get a product into, uh, into production as quickly as possible. But, you know, you know, those, those weren't typically bank finance, right? So, so there's a lot of competing tensions in the market.

And I, I don't think a lot of people know what the world's going to look like 12 months from now. And that's impacting contractors' ability to give fixed kind of firm pricing. And, and without that, you know, your question of how do you get cost certainty, Geoff? Well, I don't know if, if your contract doesn't give you any cost certainty, I don't know how you get cost certainty and then lenders are going to ask you the exact same thing is, you know, I've looked at your contract. You

don’t have cost certainty on these components. How are you going to give me some cost certainty? And, you know, there’s estimates and there’s, you know, there’s labor resourcing and you can do a bunch of diligence to check the accuracy of this and the reasonableness of this. But at the end of the day, like, do you get cost certainty on that? No, you don’t. And it’s a question of kind of what arises or what impacts your project.

So those are the competing challenges right now in the marketplace. And that all ties into kind of the difficulty of getting conventional like bank project financing.

Brendan Sigalet: [00:43:04] Uh, looking ahead, what should companies be doing now when they’re looking to potentially build these big projects and they’re going to require project financing? Um, and what role do you foresee, you know, the clean hydrogen ITC uh, playing in these, in these projects moving forward?

Yannick Beaudoin: [00:43:22] Well, I think, I the program will become useful. I think it’s an additional tool in the toolbox that developers and sponsors will be able to tap. Ultimately having more money available.

Even if it’s complicated, or there might be an issue with your lender and your creditor issue, it’s better to have a potential solution than none. The good thing as well is that Canada is trying, to a certain extent, I wouldn’t say to mimic, but to at least uh, give a program that looks and feel like what the US is doing. So to a certain extent, consultant agents, processes, uh, there’s a lot to be learned on the, uh, the various, uh, experience that can be derived from the US experience, which at least gives you a baseline. Now, your baseline has to be trued up to what Canada is doing, but at least you, you have a starting point.

If you want, if you’re looking at it for the first time,

that’s a base. That’s a good place to look at in terms of, uh, understanding how it works in practice. And my last point would be similar to, you know, in your timeline. Now you need to take that into consideration. There will be a specific due diligence process that will have to be conducted in order to tap the, uh, any financing relating to the ITC.

And, and it’s going to be illegal due diligence, uh, are you eligible? What’s the risk of a clawback? What’s the risk of a reduction? What’s the risk of, of not being eligible at all? And then there will be an accounting due diligence in terms of, of making sure that the invoices and the expenses are tracked, that they meet the requirement, that they meet the reporting.

Paper support documents are available at the right time. And then packaging that in a way that makes sense for a third-party lender looking at it. And so just like your timeline for a hydrogen plant now included design, construction, environmental issue, First Nation. Now you’re adding a new set of reporting and work on it.

On the underwriting that you have to complete. And that will now become part of your, your project timeline that you have to take into consideration in order to, to reach your final decision – go, no go, on building that thing.

Brendan Sigalet: [00:45:42] Well, thanks so much for that, Yannick. And, uh, and thank you. Thanks to you both for your, for your time today. Uh, really appreciate getting your thoughts, and, uh, on some of the practical considerations that, uh, project proponents will have to consider. in order to actually get these projects built as well as the impact, the clean hydrogen ITC will have on, on these projects. As far as some, you know, just final thoughts that I have in respect of this clean hydrogen ITC, I’d say that, you know, I, I often get focused in on just the tax aspects and that’s where my expertise is. And, uh, from a tax perspective, I’d say that

the clean hydrogen ITC is one of the most complex from a statutory perspective. The connection that you have to have between the actual statute and the engineering with respect to these projects and the interaction between the legal and the engineering is going to be a very significant driver of these projects moving forward to ensure that you have.

The maximum amount of clean hydrogen ITC that you can get from these projects based on the legislation and the technicality of the legislation. And so for any project proponents looking to benefit from the clean hydrogen ITC, I would strongly encourage you to discuss with your tax advisors earlier rather than later because it's such a main driver, um, as Yannick and Geoff have touched on, um, in respect of actually getting these projects built. But that being said, it's, it's a very, very complex statutory scheme that actually enacts this clean hydrogen ITC and getting ahead of any structuring and ensuring that the clean hydrogen ITC is going to be there, uh, in the amount that you think, uh, that you're budgeting, that it will be, will be a key factor in ensuring that you can actually get these projects to FID. As Yannick and Geoff have kind of alluded to, with respect to the US experience, uh, there's solutions that are being come up with in order to solve some of these issues in that, in that market.

Obviously, the legislation there isn't the same as it is up here. But that being said, we can look to that experience and you know, one of the key things that has come out of the US market is tax insurance. Um, it's actually absolutely massive down there and it can be a key way to allow you to ensure that the amount of clean hydrogen ITC that you expect for any project is actually going to be there.

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The content of this article is intended to provide a general guide to the subject matter. Specialist advice should be sought about your specific circumstances.

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