

96 TRG Transcript

Mike Stohler

What if you could be doing something smarter with your money that creates income. Now, if you're wanting to get ahead financially, and enjoy greater freedom of choice, if you want a comfortable retirement, and you know you'll have more choices, if you can do more with your money. Now, if you've wondered who else is creating ways to make their money work for them, and you want actionable ideas, with honest pros and cons, and no fluff. Welcome to the richer geek podcast. We're here helping people find creative ways to build wealth and financial freedom. I'm Mike Stohler, and in this podcast, you'll hear from others who are already doing these things, and learn how you can too.

Alright, everybody, welcome back to the Richer geek podcast. I'm excited to have Scott Melbye on Scott is the CEO. Listen to the CEO of uranium royalty Corp. And he's also there EVP Scott, welcome to the podcast. How you doing?

Scott Melbye

Thanks, Mike. It's great to be on with your viewers and listeners today and talk about nuclear energy and how it fits in our energy future going forward.

Mike Stohler

Yeah, it is exciting. So everybody out there that's listening. This is not the typical type of podcasts we've had with you know, real estate and syndications investing. This is an informational podcast that I think is extremely important, especially in today's world of, you know, how are we going to live in the next 100 next couple 100 years as far as our energy consumptions, you know, our, our, our tech is not going to go away, you know, I have a Tesla, you know, how are we going to power those, just the energy consumptions that we need is just expanding. And today, we're going to have Scott talk a little bit about why uranium and nuclear power is a very viable option and safe option. So Scott 36 year veteran of the nuclear energy industry, so tell us a little bit about your background, what you do.

Scott Melbye

Yeah, so I have been very fortunate to spend my entire career in uranium and nuclear energy, everything from buying and trading uranium fuel components, to buying the uranium fuel for nuclear power plants down in Arizona, outside of Phoenix and Palo Verde.

Mike Stohler

I live near there.

Scott Melbye

Yeah. And then I spend much of my career on the mining side producing uranium and selling uranium to global electric utility companies around the world and more recently, much more entrepreneurial phase of my career with a small startup. startup, I would say 10 15 years ago, that got into the business of developing uranium deposits in Texas, and now in Wyoming, to a point where today we're a junior mining company that's grown quite dramatically, and is one of the sort of uranium producers in the United States that's poised to really kick up production and meet the increasing demand. And then we've also started the uranium royalty Corp, which is a way for investors to have a diversified portfolio of royalty investments in various uranium operations around the world.

Mike Stohler

Now, in reading some research, what is your company's the first and only pure play uranium royalty and streaming company? So give you some background on that why that's important. And and what does that mean as far as what does it mean for that uranium type of industry to have this type of concept

Scott Melbye

Sure, Well, in the base and precious metals industries, about 10 15 years ago, this concept of companies based on royalty and streaming so these are companies that hold financial interests in developing mines, operating mines, but they don't own the mines. They don't have the huge workforce, they don't have the standby costs of of keeping the mine down and getting it up and running. But what they have is they get paid a royalty which is a cash interest when the mine produces or a stream, which is a physical off take of the product and the mine produces. And these are companies like Franklin Nevada, silver, Wheaton precious metals, Sandstorm row gold 250 billion dollar industry, so for investors, it's a way to invest in a commodity, but have diversified risk. You're not putting all your eggs In one mine, one company's mines, for the industry. It's a way for miners and developers to finance the development of their operations, in addition to raising equity through capital raises through equity, or through debt through a typical bank arrangement. So we're a capital provider to the uranium industry going forward.

Mike Stohler

Why is uranium so important and nuclear power compared to all of the media? It seems like solar, you know, the wind. But tell us about the importance of uranium and why it might be a more feasible option?

Scott Melbye

Yeah, well, and it's interesting your audiences, as tech professionals, would appreciate that, that some of the strongest opinion leaders and just leaders in nuclear energy today come from the tech industry, Bill Gates, Peter teal, looks like this that realize how much electricity means to our economy today, with the increased computerization of everything electrification of our, of our global economy, and certainly with transportation, you know, Elon Musk, I think, is bang on when he says, you know, our electricity demand will increase by at least 50%. If we roll out electric vehicles the way I think we'd all like to see. So, you know, wind and solar are great. There's nothing wrong with renewables. In fact, they have a very important part in the energy mix, but they have limitations. And their biggest limitation is that they only run 25 to 35% of the time, at best. So if we're really serious about producing clean energy, and moving towards a lower carbon future, we need to figure out what to do with the other 70% of our energy generation. And this is where nuclear fits in very nicely. It's something we've always known in the nuclear energy industry.

But it's only been recently that I would say politicians, policymakers, the investment community, even environmentalist, have come on board and said, Yeah, you know what, nuclear, not only can produce clean air, carbon free energy, but it can do it, you know, the 95% capacity factors. So we really view ourselves as as a perfect complement to renewables, which are more intermittent sources of supply, but we can keep the lights on when the wind isn't blowing, or the sun isn't shining. That's very important. I mean, if you don't go down that path, it's a lot like, you know, Germany went down the green energy path 15 years ago, and spent hundreds of millions of euros on going towards renewable energy, but at the same time, phased out their commitment to nuclear power. So in 2021, today, Germany's paying electricity prices, 50%, higher than neighboring France, which is all nuclear, and they've really done very little to impact their carbon emissions. And in Germany, with that kind of commitments, green energy, you know, hasn't been able to reduce their carbon emissions, they're just burning more Russian gas and dirty lignite coal. Well, what hope does China have or India have? And so we really believe that nuclear, I mean, isn't the whole solution to our energy needs going forward, but it's a very important component and fix fits well, in the next.

Mike Stohler

Why do you think people are so it politicians, people in general, have this? adverse, you know, adversary thought of nuclear power? It just, you know, for me, it doesn't make sense because I, being in the military, solid nuclear power I was I was around it. To me, it's extremely clean is

extremely wonderful. But why do you think, is it just because you're saying it's nuclear? I mean, they just can't get around that word?

Scott Melby

Well, I think one of the I mean, I think the industry is really done a poor job of, of promoting ourselves and really getting the strengths across to the public. You know, it doesn't help that, you know, nuclear energy really came out of the nuclear weapons programs of, you know, the 1940s. But it was very quickly I think, Dwight D. Eisenhower 1950 realize that the whole Atoms for Peace movement that, you know, using fission and uranium and nuclear energy to produce electricity is a very different story than then then bombs. I mean, in more recent years, we've actually dismantled nuclear weapons in Russia, and blended down the uranium and use the fuel to power electricity in cities in the United States. So it's very much these days. It's an energy story, but I think, you know, we've been done a poor job about communicating the safety of nicknames or women. If you measure fatalities by any energy source we have available today. Nuclear is the safest of all energy sources. based on how much a massive amounts of electricity that produces over time, its safety record is comparable is lower, but it's comparable to wind and solar. In terms of its carbon emissions, it's the lowest total system, carbon emissions, and it's the only low carbon energy source that produces 24/7 power. waste is often raised as a major issue, I mean, nuclear energy has actually been the most responsible in dealing with its waste.

Because we've kept every gram of waste we've ever produced since the 1950s. Instead of pumping it out of a smokestack or out of pipeline into a river, we've kept it. And we're going to either store it permanently in a geologic repository that hasn't changed for hundreds of 1000s or millions of years, or will reprocess it into more fuel going forward. And the volume of that waste in the United States would fit on one football field. So I think there's a perception that the waste is just an insurmountable scientific challenge. It's not it's really political, not scientific. So again, we just need to do a better job of communicating that.

I do think, though, that it's clean energy aspects and reliability. We've seen polar vortexes and the weather conditions with with changing climate tarry conditions, where extreme winters are hot, hot summers were 24 seven energy is critical and even, you know, very efficient ways to produce electricity like natural gas, priced themselves out of the market, like you saw in Texas, during the Cold Snap, there were consumers were hit with with \$10,000 electricity bills, because so much of that cost of that generation is the fuel. Whereas uranium, you know, one runs through hurricanes, heat spells, cold spells, the fuels on site, like your nuclear reactors, and the submarines that they're only refueled intermittently every 1824 months in the commercial nuclear case. So they tend to have a lot of strengths that are now in this sort of societal transformation of the way we use and generate electricity is really being appreciated a lot more.

Mike Stohler

I think it is important. It's, you know, one of the things that everyone is talking about is the carbon footprint. And I think it's very important, while you're saying but just how clean is the best thing

that you said is there's there's no smokestacks, right. People don't realize that, even with the wind turbines, those blades when they go bad, they don't, you have to bury them, they, they don't go away, you know, they will be there. 10,000 years from now. You can't recycle those those, those turbine blades. And I think that sometime in the future, this nuclear waste, we're going to have some geniuses out there say, Hey, remember all that nuclear waste, we can actually make it into something and reuse it.

Scott Melbye

Now, we're actually doing that. And in France, you know, where they do recycle their fuel? I think, you know, in the United States and elsewhere, uranium is fairly relatively cheap. So we kind of go through that once through cycle where I think the solution is to store the spent fuel in a retrievable fashion, we're taking back 100 years from now, we're going to need every energy source that's available to us. And if there's still 80% of the fuel left in the spent fuel, and we can we process that into new fuel, why would we do it and you know, is being done elsewhere in the world? Like, like in France today?

Mike Stohler

Yeah. What exactly is uranium? You know, and when it you know, I know it has a part to do with nuclear fuel, or what is uranium.

Scott Melbye

So, uranium is, is one of the most commonly found elements in in the earth, which surprises people it's, it's in sandstone deposits. It's in hard rock deposits. In order to be a commercially viable deposit that turns into a mine you've got to find that uranium in in concentrated levels that justify the cost of mining and processing. But it is a it is a metal, it's an energy metal, which is mined, and then basically producing yellowcake or uranium concentrates which is converted into a gas. And then the gas is spun in a centrifuge to separate the 235 isotopes from the other isotopes which are not fissionable and you get uranium which is enriched to a level of about 5% which can then sustain a reaction a reactor basically boils water and spins a turbine. So that's very different than nuclear weapons return on richmont level. 97% on that range. So, again, it's an energy mineral that is mine. You know, in the United States, we have probably a billion pounds of known unlikely resources across the western United States. Canada is a major producer, kazakhstan, Australia, Southern Africa, Central Africa. So it's quite available. I mean, we could sustain nuclear power for many hundreds of years. With the known resources we have, it's not something that we're going to run out of quickly, because that that's obviously a concern and the sustainability

Mike Stohler

of our Do you see anything else? As far as with nuclear power? Are we going to see it not just with, you know, taking over as far as powering things as far as homes and buildings and, and submarines? Is there any other type of market that you see that uranium and nuclear energy might be using? And I'm thinking airplanes or you know, it's other things? Yeah.

Scott Melbye

So, you know, clearly space travel where we are using nuclear power rockets. And once we get to Mars, or wherever we set up basis, you've got to be able to produce electricity more sustainably, then you might be able to get from just the typical traditional solar panels. We're using nuclear power to produce hydrogen, which is very important for transportation and clean energy options going forward. desalination of water is incredibly energy intensive, but critical in places where they just lacked the clean and clean water resources like we have United States, the Middle East, for example. So we see, you know, credible applications. Well, obviously, the medical has always been important in cancer treatments, diagnosis, treatment of cancer. And another one that's very interesting, was announced today, that energy harbor that operates nuclear power plants in Ohio, is co citing in support of cryptocurrency mining, because we're, you know, the discussion of, okay, kryptos are great, but you know, how are they produced? Are they producing an environmentally friendly matter, or are they not? And so citing crypto currency mining, next to clean energy, nuclear power plants, you know, is another application

So I think just going forward, I mean, you've seen companies whether it's Amazon or Google commit to carbon free energy or big mining companies, Newmont, the world's largest gold company located in Denver, where Ireland has committed to a 30% reduction in carbon emissions by 2030 and 100% by 2050. That's a tall order. And I think it's one thing and I'm not against it. But I mean, a lot of these carbon free targets are being met by offsets, they're still relying on fossil fueled energy to meet some of their needs.

But the they're offsetting that with investments in mangrove swamps in Brazil are planning for somewhere else in the world. That's fine, that is a legitimate offset. But at some point, we need to figure out how to deliver, you know, the electricity in a carbon free manner. So a company can be not just net zero, but from a growth perspective, achieving that and so we're seeing nuclear power being adopted in micro reactors for mining operations, whether it's in Northern Ontario, or could that was territory's who knows, you know, maybe amongst the gold mines in Nevada, you would have a micro or small modular reactor that provides carbon free energy, not just intermittently, which is very hard to run a factory or a mine an intermittent energy but can run 24 seven in a clean manner. The small modular reactors are something to that are really the next stage where small modular reactor means a reactor that's 50 or 100 megawatts, not 1500 that can be built for hundreds of millions, not billions of dollars.

It can be built on a scalable manner where you can build one to three segments at a time and build your way up to you know, a significant capacity so they're great for remote locations, Island locations, yeah, grids that are heavily burdened by renewable power that intermittency causes grid operators real headaches, trying to meet demand with something that's not running all the time. So small modular reactors have place. And I was very fortunate to attend the announcement about five weeks ago in Cheyenne, Wyoming, where Bill Gates company terrapower out of Washington State is selling a reactor to his, I think his bridge buddy, Warren Buffett who owns Pacific Corp, The Rocky Mountain energy owns the utility company in Wyoming, where they're buying one of these 300 megawatt advanced reactors, citing it on the location of a retiring coal fired plant. So, you know, I don't care which side of the political spectrum you're on, this just touches all the buttons, employs people that you know, did rely on that coal industry, which is so important in coal country.

And if we're going to phase coal out, we've got to give them viable alternatives to live and sustain themselves in those communities. So signing a nuclear power plant where a lot of the skills that they learn at the coal fired plant are transferrable. So, you know, we're seeing that that next wave of reactors with small, modular and advanced, right, because you're still seeing big, big reactors built around the world and China, you know, they are big baseload needs, we've added 56 reactors to the grid, globally in the last eight years, another 51, under construction. So it really is a growth story. And you know, where I come in, in the uranium side of the business is, you know, we've under invested in the uranium mining and development around the world for the last eight to 10 years. And so, investments in being able to supply uranium to meet this increasing demand for nuclear energy is where my two companies are really positioned. |

Mike Stohler

Now, how small Do you think these reactors can get? Is this something that can be you think we'll get to the word mobile? You know, that we can disaster areas go in and airs? Do you see that future?

Scott Melbye

Absolutely. One of the applications that's really being advanced right now is through the Defense Department. And it's called Project payload. And I was it was interesting for me to learn that in all of our military interventions in Syria, Iraq, Afghanistan, our highest number of casualties, has come from the supply logistical supply lines to those bases. And the largest consumable at those bases is diesel oil to keep the power running at those forward combat bases. So the US Defense Department is realized, okay, we've got to reduce the casualties and reduce the number of convoys to these dangerous areas. So they developed micro reactors, which fit in the size of a shipping container, they're shipped on site, and can provide power without having to continually slot supply it with tanker truck loads of diesel oil. So you know, that is being developed that same technology can be used in mining operations, remote locations, islands, it is being used in space traveling in rockets, where you need a lot of energy in a small package. Whether it goes to vehicles, I mean, I think the better use for nuclear power in transportation is through the

generation of electricity that goes into electric vehicles. I mean, if you're feeling your Tesla with coal fired power plant, okay, it's great. You know, you don't have the the emissions from your tailpipe, but there's a coal fired plant somewhere that still is, and if we can move towards a greater carbon free contribution to the feeling of electric vehicles, we've really achieved something.

Mike Stohler

Yeah, it's, you know, this has been extremely I don't even know how to put it. It's, it's something that you don't think about. And, you know, I'm so glad that you came on, because it's, I have heard Ilan say that, look, we don't have enough electricity to do what these administration's these these government people want, you know, they just say do it. And the real geniuses behind the products are like, you know, not create something more.

Scott Melbye

This is the big challenge. I mean, the way we use and generate electricity is determined by three things, public policy, consumer preference, and then the technological aspects. And a lot of what's been happening lately has been driven by the public policy and the consumer preference, but the rubber hits the road when it comes to technology, how much energy we're actually going to need. And the way you generate that, we can't just wave a magic wand and get all the carbon free power that we want and need. I mean, not to pick on California, your neighbor there to the

Mike Stohler

Well you can pick on him, that's that's fine.

Scott Melbye

I mean, California wants to you know, go to the sale of all electric vehicles by 2030 or 35. Yet today cannot reliably supply electricity to homes and businesses in 2021. So, you know, we really got to deal with this. And this is why folks like Bill Gates and Peter Thiel are all over this because they've done the math, they've done the science and if we really want to be serious about carbon reduction or cleaner energy, you don't have to be a climate change, warrior to love nuclear power, because, you know, if you're a kid growing up in Mumbai, or Delhi or Beijing, and you can't go out and play for, you know, several days straight because of the pollution issues from a profile, or I would argue that's probably more important to them, then, you know, one or two degree change in global temperatures.

Mike Stohler

Yeah.

Scott Melbye

But, you know, we can address both of them.

Mike Stohler

I think it's so funny it, you know, you're, you're hitting on these these climate change activists, and I think, you know, 50% of love nuclear 50% of them are, you know, hate it, you know, whether it's due to misconceptions or not, and then, you know, how hard is it with ever changing policies every, you know, potential. So new in the White House every four years? How hard is it to continue to push what you want to do with these ever changing? All right, you know, here you go, you've got four years of, let's do it, let's you know, and then someone else comes in, and oh, my God, nuclear, you're gonna kill everyone.

Scott Melbye

And like, the problem is, it's like energy issues are not four year problems or challenges. They're 10 and 100 year challenges, and they don't fit well in an election cycle, especially when you're swinging back and forth. more frequently. So you know, that that is a critical step. I mean, but, you know, public policy is one thing, consumer preferences, the other, you know, given example, during, during the Trump administration, where, you know, the I would say the phase out of coal fired power generation was slowed. Under under his administration, there were no electric utility companies in the United States that went out and said, Oh, Now's my opportunity to go out and build a coal fired power plant. I think in some cases, public policies out front. And other areas, consumer preference gets out ahead of public policy.

And I think with greener energy, cleaner energy, the public's demanding it, no matter who's in the White House, now, you have to do it wisely and smartly. And, and there may be parts of the world or even parts of United States where you're going to need a component of coal, because I mean, we're I live in Colorado, we're 50 60%. Coal, you do without that we're going to have reliability issues and cost issues, to deliver electricity. But doesn't mean we shouldn't be transitioning to cleaner energy. And nuclear certainly can fit that bill in and you did mention public opinion. And for much of my career, nuclear has been a 50 50 sort of public acceptance, situation where you that people love it, or they hate it. Today, in light of cleaner energy, needs and demands from society, we're now seeing a 76% approval rating, if you will, for nuclear energy as part of part of the solution going forward.

So that's going to make it a lot easier for politicians and decision makers to get behind and support I, I had the opportunity, the real privilege to testify before the Senate Energy and Natural Resources Committee, month before last and speak to regaining America's leadership and nuclear

energy, both here and abroad. And you know, 10 15 years ago, that would have been a very contentious setting, not saying I'd be like Martin's Trek, like coming in and testifying on behalf of pharma or Jack Dorsey defending on public privacy issues. But I would have had the Democratic senators really use it as an opportunity to just go after nuclear power and try to tear down. That was not the case, and is not the case presently back on Capitol Hill where even former opponents of nuclear power have either quieted or or kind of stifled their their rhetoric and in opposition towards nuclear power.

And other Democrats, like Joe Manchin, are absolutely 100% on board with it because of what it can provide the country and so it's one of the few things that is truly bipartisan in nature back in DC these days. So I feel quite fortunate to be in that position, because this energy revolution that we're going to get, I mean, there are winners and losers, and that it's you know, being in a state that depends heavily on the oil and gas industry in Colorado, are getting put to fossil fuels. And that's a very difficult transition for them. So, you know, we're going to have to figure out how to balance all these interests, but I know nuclear energy today. You know, this is about as bipartisan support as you get.

Mike Stohler

Yeah. And you know, the important thing is, is to Remember that a can't get rid of coal 100%. Because that is, it's used in other types of manufacturing it's in, it's in things that we build, it's in, you know, it's it's not just an energy thing. So we have to go side by side, you know, and maybe we we use less, a lot less of the coal for the energy part. But you know, I don't see, you know, unless we can create things differently. You know, coal is not really going to

Scott Melbye

Only need coal to make steel. And that's pretty boilerplate ways to do carbon sequestration and advances in sequestering the carbon emissions from coal. So we need to be, you know, America's blessed with many energy alternatives, we should be using the best use of of everything we've got at our disposal.

Mike Stohler

What do you see the future? that we haven't talked about yet? Are we going to have our own little household reactors? You know, they're going to be, you know, what do you see if you if you had your wish, where do you see nuclear power?

Scott Melbye

I mean, I think that that much decentralization and nuclear is probably not the best efficient use. I mean, frankly, solar is a better decentralized form for placing something on your home or your roof. But I do see nuclear, whether it's the 1600 megawatt units that are powering major cities and economies or the small modular reactors that are backing up renewables and part of the mix. You know, I think that really gives us you know, again, if your tech audience knows that, you know, we're going to be using more electricity, not less, I've never seen an economy in the history of mankind grow on using less energy, it's more energy, and we shouldn't be afraid to use more energy, we're always total conserve energy, what if we can produce it cleanly? You know, we can produce it abundantly. And that drives, you know, our economy, why shouldn't we use more of it, and I think that's where we've got to, you know, continue to innovate and, and make advances in oil energy technologies to really deliver that that promise.

Mike Stohler

But I love the fact that we could if we could get to the point where we can use nuclear power for emergency situations. Third World countries Yeah, even with the United States, you look at the Navajo Nation here in Arizona, and you look at some of the tribal lands, and some people, you know, they're rolling blackouts, they have really big issues with electricity, and other people in in, it doesn't have to really be a third world country, you know, just there are people in places where Oh, my God, if you could just roll in this smaller reactor, and then you know, even if it's temporary, and especially when you know, the hurricanes and and disasters happened. Wow, you know, I don't know how that works. I'm not that smart. But I know that it sounds wonderful.

Scott Melbye

We have done that on a small scale with the US Navy, where I think it was in Haiti after the earthquake, where they did dock the aircraft carrier and then reverse the transmission. And so they were actually providing electricity from the reactors on board, you know, to the grid, the Russians are developing floating reactors that are essentially the same thing providing electricity on remote Siberian region. So there's a lot of innovative applications we can use, but it's all about delivering clean, reliable energy.

Mike Stohler

Well, Scott, I could go on for probably another hour or so. But yeah, this has been wonderful. How can I think I've piqued you piqued my interest? I know you're going to pique our listeners interest? How can people learn more about what you do and about uranium and nuclear missiles?

Scott Melbye

Yeah, I think if you're interested in nuclear energy, and just the whole broader picture, I would go to the World Nuclear Association out of London go on their website, go to the Nuclear Energy Institute, which is our nuclear industry organization in DC, my company's uranium royalty Corp and Uranium Energy Corp. on their websites, you can see what we do in terms of supplying and financing the development of new uranium mines. And that's a way to invest in in this green energy story. You know, the ESG investing and clean investing has become such a huge thing very real and it's certainly boosting our industry where we're seeing funds that that you know, haven't already invested heavily in Wind and Solar and battery companies and to be able to invest in uranium, you know is for them as additional new industry for them to support with clean investments. So, I would encourage your listeners if if green investing in nuclear energy is of interest on Uranium Energy Corp comm and uraniumroyalty.com are two ways to have a direct investment and cleaner energy.

Mike Stohler

Wonderful. Well, Scott, I thank you very much for coming on and enlightening us. But this, you know, this wonderful product that I think is the future of the world. Thank you, sir. I appreciate

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