

TransAlta Corporation

Second Quarter 2020 Results Conference Call

Event Date/Time: July 31, 2020 — 11:00 a.m. E.T.

Length: 79 minutes

"While Cision has used commercially reasonable efforts to produce this transcript, it does not represent or warrant that this transcript is error-free. Cision will not be responsible for any direct, indirect, incidental, special, consequential, loss of profits or other damages or liabilities which may arise out of or result from any use made of this transcript or any error contained therein."

« Bien que Cision ait fait des efforts commercialement raisonnables afin de produire cette transcription, la société ne peut affirmer ou garantir qu'elle ne contient aucune erreur. Cision ne peut être tenue responsable pour toute perte de profits ou autres dommages ou responsabilité causé par ou découlant directement, indirectement, accessoirement ou spécialement de toute erreur liée à l'utilisation de ce texte ou à toute erreur qu'il contiendrait. »

CORPORATE PARTICIPANTS

Chiara Valentini

TransAlta Corporation — Managing Director, Strategic Finance and Investor Relations

Dawn Farrell

TransAlta Corporation — President and Chief Executive Officer

Todd Stack

TransAlta Corporation — Chief Financial Officer

John Kousinioris

TransAlta Corporation — Chief Operating Officer

Kerry O'Reilly Wilks

TransAlta Corporation — Chief Legal, Regulatory and External Affairs Officer

CONFERENCE CALL PARTICIPANTS

Rob Hope

Scotiabank — Analyst

Patrick Kenny

National Bank Financial — Analyst

Ben Pham

BMO — Analyst

Maurice Choy

RBC Capital Markets — Analyst

Andrew Kuske

Credit Suisse — Analyst

John Mould

TD Securities — Analyst

Mark Jarvi

CIBC Capital Markets — Analyst

Naji Baydoun

Industrial Alliance Securities — Analyst

Chris Varcoe

Calgary Herald — Journalist

PRESENTATION

Operator

Ladies and gentlemen, thank you for standing by, and welcome to TransAlta Corporation's second quarter 2020 results conference call. At this time, all participants are in a listen-only mode.

After the speaker presentation, there will be a question-and-answer session. To ask a question during the session, you will need to press *, and then 1 on your telephone.

Please be advised today's conference is being recorded. And if you require any further assistance, please press *, 0.

I would now like to hand the conference over to Chiara Valentini. Thank you. Please go ahead.

Chiara Valentini — Managing Director, Strategic Finance and Investor Relations, TransAlta Corporation

Thank you, Chris. Good morning, everyone, and welcome to TransAlta's second quarter 2020 conference call. With me today are Dawn Farrell, President and Chief Executive Officer; Todd Stack, Chief Financial Officer; John Kousinioris, Chief Operating Officer; and Kerry O'Reilly Wilks, Chief Legal, Regulatory and External Affairs Officer.

Today's call is webcast, and I invite those listening on the phone to view the supporting slides that are posted on the website. A replay of the call will be available later today, and a transcript will be posted to our website shortly thereafter.

All the information provided during this conference call is subject to the forward-looking statement qualifications set out here on Slide 2, further detailed in our MD&A, and incorporated in full for the purposes of today's call.

All amounts referenced during the call are in Canadian currency unless otherwise stated.

The non-IFRS terminology used, including comparable EBITDA, funds from operations, and free cash flow, are also reconciled in the MD&A for your reference.

On today's call, Dawn and Todd will provide an overview of the quarter's results, along with expectations for the balance of year. After these prepared remarks, we will open the call for questions.

And with that, let me turn the call over to Dawn.

Dawn Farrell — President and Chief Executive Officer, TransAlta Corporation

Thanks, Chiara, and welcome, everyone, to the call today. We are presenting our results today from our offices here in Calgary.

So as of last Monday, all our employees are now either back in their offices here or at the plants across our locations in Canada, United States, and Australia. I cannot tell you how great it is to be here today presenting a strong second quarter, along with all our people safely back at our sites and doing what they do best, which is working to deliver low-cost, reliable, and clean power to our customers and communities.

Our TransAlta employees are all leaders here at work and in their communities and families, as they have quickly learned how to practice COVID safety protocols, which are keeping us safe and allowing us to see each other in person, of course, while maintaining a two-metre distance.

We're very excited to report results for the quarter that are solid. Our quarter is only slightly below what we expected to be able to do in a pre-COVID world, and this is actually exceptional when one steps back to reflect on how much different the world is under the cloud of the pandemic. It is a true testament to the diversity and stability of our portfolio and the resilience and tenacity of the employees who work at this company.

When we left the offices in early March, we were facing into a significant drop in power demand in almost every jurisdiction we either operated in or traded in. We immediately set up systems to measure our liquidity because we needed to be able to assess the ability of our customers to pay their bills.

We also saw reduced volatility in electricity pricing in every jurisdiction, which could have impacted the ability of our trading business to deliver their results.

And of course, we were worried about the safety of our employees, many of whom had to continue to go to the plants, and many had to stay in their homes where they did their work in makeshift offices while taking care of their families.

I'm very pleased today to tell you that many of our concerns simply did not take hold. We are reporting a second quarter that is strong, with excellent safety and operational results and stronger-than-expected revenue in our Alberta business, due to some great hedging by our asset optimizers.

We had outstanding performance in our trading business, which delivered one of the strongest Q2s in recent history. Our trading operations ran smoothly, albeit from their homes, and our plants achieved strong availability, all while dealing with the uncertainty of a pandemic and the challenges of having kids out of school.

As we look at the cash that we generated in the first half of the year and what's to come as we look ahead, we continue to close in on our goal of reducing senior recourse debt to \$1.2 billion by November. You all know that we've been after this objective for several years now and cannot wait until our fourth quarter call to tell you that it's finally been done and dusted. We're also confident that we can complete our investments under our strategy, without the need for additional funding.

So our highlights of the second quarter include delivering \$217 million of EBITDA and \$91 million of free cash flow, or \$0.33 per share—results that were ahead of 2019 by 94 percent on a per-share basis.

We achieved strong availability and safety performance. The entire fleet had an average availability of 90.7 percent for the quarter, up from 83.8 percent last year. And year to date, we've achieved a safety result of 1.4 on our total injury frequency rate, which is great performance.

We delivered strong operational performance while all our plant staff showed up every day and worked together under COVID-19 protocols that were approved by our local health authorities in each region. We are deeply grateful to the men and women in our health authorities across our sites who work side by side with us to develop safety protocols that kept our workforce in the field and head office safe.

We needed to provide electricity for the economy and our customers, and they built our confidence around what people can do together, if they're willing to follow a few very simple rules. They also helped us continue with all our construction projects and we are moving ahead on every project with very few delays.

Now, unfortunately, COVID had a negative impact on the stock price of almost every Alberta company, as it had such a tremendous impact on oil demand, oil pricing, and oil production here in Alberta. As such, we used that as an opportunity to use our NCIB to return an additional \$12 million of capital to our shareholders with our share buyback program, and year to date, we've returned approximately \$21 million to shareholders at an average price of \$7.51 per share.

Our finance team did an outstanding job of managing cash and our long-term contracts with our customers were excellent. Any worries that we had about the depth of this crisis were set aside through the quarter as all our customers continued to pay their bills.

We ended the quarter with continued strong liquidity at \$1.6 billion, which includes approximately \$250 million of cash, and we're poised to repay our 2020 bond maturity later this year without further funding requirements from the market.

So just a few words on our strategic priorities. We continue to track on all our priorities with very little delay or very little change in timing. Our strategy continues to focus on delivering our pipeline of investments regarding our Coal to Gas here in Alberta, our wind, and our cogeneration projects.

On our Coal to Gas strategy, we are set now to kick off the Sundance 6 conversion in September of this year, and both Keephills conversions are on time and getting ready to go in the 2021 period.

We also continued to advance our gas supply strategy here in Alberta, and based on that progress, we now do not see a need to complete a dual fuel conversion on our K3 unit. And that unit will be fully converted to gas-only in Q3 of next year. This slightly reduces our capital requirement for that project.

We're progressing the repowering of Sundance Unit 5 and have advanced the competition for the EPC contract and expect to receive EPC's bid proposals here in the fall.

We gave notice to retire our currently mothballed Sundance Unit 3 coal-fired unit out of the market by July 31, 2020, today. This decision was largely based on the condition and age of the unit and our flexibility and options around repowering our units and our existing Generation portfolio. This is another milestone in our transition plan to get to 100 percent clean energy by 2025 and closing the chapter on our coal-fired generation.

On the cogeneration front, during the quarter we finalized the acquisition of our first cogeneration facility in the United States. We welcomed the Ada facility located in Michigan, along with the new customers, Consumers Energy and Amway. This marks our first foothold in the US in this segment as we progress on our on-site generation goals.

On our Kaybob project with SemCAMS, we are on track to start construction in early fall. Factory tests of the gas turbines have been completed and we have major equipment delivery set for later this year.

On the renewables front, we have construction underway on both Windrise and WindCharger. We expect to reach COD on WindCharger in a few weeks. Bulk of the equipment is now on site and installed, and we're progressing with the factory testing on the transformers.

On Windrise, site construction commenced as planned in April and is tracking well, with turbine deliveries expected later this year. Our diligence and compliance to COVID-19 protocols remains solid to date, which enables that project to continue.

Skookumchuck now has 18 turbines up, with 8 mechanical completion certificates issued. The first circuit of six turbines have been energized and the rest are expected to commission in the next quarter. And we'll make our decision on our option to buy 49 percent of the project sometime during the quarter.

As we look towards the balance of year, we continue to have confidence in our 2020 free cash flow guidance. Todd will talk you through our views of the second half recovery in power demand here in Alberta, as everyone returns to their offices and schools. And if all goes expected, we also expect to hit the lower end of our EBITDA guidance.

I do have one last comment before I turn it over to Todd. We did see particularly weak Alberta spot market prices in June due to short-term disruptions in supply and demand, loss of supply due to both high winds, and loss of hydro coming in through the Pacific Northwest that flowed into Alberta, of course, through our tie line (phon).

Demand fell by almost 1,000 megawatts in March. It has recovered somewhat since then, but June was a month with lots of supply and an unheard of level of demand disruption. Stock prices in the Alberta market in June are not an indicator of the future, which we will talk you through today.

What you'll see from Todd today is that our diversified fleet, our level of contractedness, and our approach to asset optimization mostly offset these shorter-term headwinds in the Alberta market. TransAlta's diversified EBITDA, our free cash flow, our liquidity, and the fact that we have our strategy fully funded allows us to be one of the few companies globally that can deliver on our investment plans with very minor changes in timing and on the path that we set prior to the full impacts of this pandemic. Pretty remarkable, in my view.

So with that, I'm going to turn it over to Todd for more colour on the financials and then we'll all come back with questions for the team.

Todd Stack — Chief Financial Officer, TransAlta Corporation

Thank you, Dawn, and welcome to everyone on the call.

I'll start by reviewing the financial highlights on Slide 6.

During our Q1 call, we indicated electricity demand was expected to remain low and that merchant power prices would be weak in Q2, which they were. While these conditions impacted our merchant sales, our fleet-wide operational and financial results for the second quarter of 2020 continued to be strong and were indicative of the resilience of our operations, our hedging and marketing capability, and our portfolio diversification.

During the quarter, we generated \$217 million of EBITDA, which was in line with the same period in 2019, despite the challenge of lower electricity demand. As I will highlight later on, merchant sales from our Alberta coal segment represents a relatively small contribution to the Company's overall EBITDA.

Our EBIDTA in the quarter was generated by strong and predictable contributions from our gas and renewables segments, combined with strong cost controls and performance from our Energy Marketing team.

Free cash flow also improved by \$42 million year over year to \$91 million in Q2 versus \$49 million last year. On a per-share basis, we delivered free cash flow of \$0.33 per share in the quarter and exceeded 2019 results by 94 percent, which was in line with our expectations. Stronger free cash flow was largely attributable to reduced capital spend on major maintenance, with two outages in Q2 2019 versus no major outages in 2020.

Year to date, we've generated \$200 million of free cash flow or \$0.72 per share, a 41 percent increase over 2019's six-month performance. This is an exceptional result for the Company and one of the strongest first halves in the last decade.

Turning to the Alberta power market, spot market Alberta power prices in the quarter averaged \$30 per megawatt hour and were considerably lower than the second quarter of 2019, which averaged \$57 per megawatt hour. However, our merchant units at Alberta Thermal were able to continue to realize revenues in the mid \$50s, due to our financial hedging and dispatch optimization.

As Dawn said earlier, the province had significant supply available from both within the province as well as from imports. In the province, supply was strong due to fewer planned outages and strong resource supply from the Wind and Hydro segments. During the quarter, we also saw significant low-cost imports into Alberta from excess hydro and wind production from the Pacific Northwest.

Electricity demand was impacted throughout Q2 by COVID-19 and the continuing impact of lower oil prices on demand. We estimate load reductions peaked at about 1,100 megawatts but is now trending in the 500-to-600-megawatt range versus 2019.

As we're moving through the summer, we're seeing demand recover week by week as the economy starts to reopen. Over the past several weeks, we've seen many offices and businesses reopen and people return to restaurants and other attractions. We expect this to continue through the fall as kids go back to school and some of the shut-in oil production is brought back into the market.

Our Alberta coal baseload generation is now completely hedged for Q3, and we are partially hedged for Q4, which is the right position as we see prices recovering somewhat to reflect the increases in demand from increased economic activity.

For the Alberta market, when we look ahead to 2021, we could hedge volumes if we wanted into the \$51 per-megawatt-hour range. That market is thinly traded and will begin to adjust as the market gets a sense of how demand is recovering over the second half of this year.

We aren't a seller at these prices for the following reasons:

First, there are a significant number of plant outages scheduled in 2021, as many of the coal units have planned outages to be converted to gas or dual fuel. These outages will naturally tighten supply/demand balances in the province.

Second, we expect the provincial carbon tax to increase to \$40 per tonne to remain in line with the federal program. This raises the cost of production and has to be recovered through higher power prices.

Third, the Alberta power purchase arrangements will transition next year. Six generating units, representing roughly 2,400 megawatts of mid-merit thermal capacity, are currently dispatched by the balancing pool and contracted under the existing PPAs.

Beginning in January, the owners of the PPA assets will now be in complete alignment with the risks of owning, operating, and investing in the assets. In order to recover capacity costs, we anticipate

plant owners will structure their energy offers accordingly to reflect the recovery for return of and on capital, as there is no mechanism outside of price of energy to do so.

We were pleased to see the clarification provided by the MSA Enforcement statement in late June on economic withholding. The MSA provided that in an energy-only electricity market, the pool price must sometimes exceed short-run marginal cost, if the cost of generation capacity is to be recovered from the market. This will be the first time in the Alberta market that this new alignment in ownership and clarity in rules will play out in terms of price formation.

And finally, as the economy reopens, we see increasing demand as schools and businesses ramp up to higher levels. Increasing demand generally correlates to increasing prices.

As an aside, when you study the cost structure of the generating units in the market and where demand crosses supply, the average price often settles in the financial and spot market to an average of \$60 per megawatt hour.

Next year, we expect additional volatility. So taking an average price times volume will not tell the tale of how we'll do in the market. For our fleet, peaking plants and hydro will make their money as prices increase during periods of tightness due to outages, demand, and weather. We do expect the market to settle close to a historical average, but our job will be to position ourselves to increase margins in periods of volatility.

We had strong operating performance across the Generation fleet, and segmented Generation cash flows improved year over year by 16 percent. This was led by expected strong performance from our US Coal segment and the increased contribution from the Wind segment.

Overall, we continue to produce strong cash flows across all of our fuel segments, with our largest contribution this quarter coming from the Wind and Solar segment, which has contributed about 30 percent of our segment cash flows so far this year.

Wind and Solar EBITDA improved in the quarter, primarily due to the full period contribution of Antrim and Big Level wind facilities, which were commissioned in December, along with higher production due to excellent wind resource across all regions.

The US Coal segment returned to normal results for the quarter and were substantially higher than the second quarter of 2019. We benefitted from lower-priced power purchases and strengthening of the US dollar relative to the Canadian dollar.

For the remainder of the year, we continue to expect strong results for the segment, as the majority of our production is hedged.

Cash flow from the Alberta thermal fleet was in line with 2019 and represents about 11 percent of our total segment cash flow.

Although EBITDA declined by \$36 million, this was offset by lower maintenance capital spend, resulting in strong segment cash flow. EBITDA in the segment was also impacted by a \$7 million increase to our provision in fuel and purchased power relating to the Alberta ISO Line Loss dispute for transmission losses for the years 2006 to 2016.

Many of you may not recall this proceeding, so let me take a minute to go through it. This regulatory process has been ongoing for over a decade and relates to how the ISO used to calculate transmission loss fees for all generators in the province. During Q2, the ISO was able to provide the results for the recalculation of 3 of the 11 years under dispute, which allowed us to better estimate the potential impact. In total, we've recognized a \$20 million provision relating to this dispute. The estimated amounts

continue to be uncertain, and the ISO's recalculated loss factors remain subject to further review and change.

Revenue from the Alberta thermal fleet in the quarter averaged approximately \$65 per megawatt hour and was fairly consistent with last year. We were able to maintain our per-megawatt hour revenues through capacity payments on our PPA units, as well as from significant hedging and dispatch optimization in the quarter.

Strong per-megawatt hour revenues were offset by increased fuel costs of \$40 per megawatt hour compared with \$33 last year. A portion of this increase, about \$3, is due to the recognition of the transmission line loss provision. The residual increase is related to higher year-over-year gas prices and our fixed coal costs now being spread over lower volumes as a result of lower production in the mine in the quarter.

We had strong production from our Hydro segment in Q2 due to strong seasonal runoff. But with an oversupplied power market, there was limited opportunity to capture any price premiums. Realized prices in the quarter for energy and ancillary services were off compared to our historical averages, due to lack of price volatility.

Our Energy Marketing segment exceeded last year's quarterly performance by \$10 million. Results were attained through short-term strategies across our various geographic regions in both the power and natural gas markets.

Our Corporate segment incurred a quarter-over-quarter favourable run rate impact of \$5 million due to lower operating costs. After including for the impact of the total return swap, our Corporate segment cash flows decreased by a total of \$12 million compared to 2019; an excellent result for the segment.

For the quarter, our segmented cash flow of \$191 million was ahead of 2019 by \$47 million. And as I discussed earlier, the Company generated consolidated free cash flow of \$91 million, an increase of \$42 million compared to the same period last year.

As Dawn mentioned, liquidity at TransAlta is very strong and has been for some time. We ended the quarter with \$1.6 billion in liquidity, including approximately \$250 million in cash. In addition to the current liquidity, we will be receiving \$400 million from the second tranche of financing from the Brookfield investment in the fourth quarter of 2020.

Our strong liquidity position sets us up well to repay our upcoming bond maturity and to continue funding our Coal to Gas program and advance our renewable development projects.

With respect to our share buyback program, year to date, we have repurchased and cancelled \$21 million in shares, which is tracking with our capital allocation strategy for 2020.

As you can see on Slide 10, over the past few years, we've been focused on reducing our corporate debt levels in preparation for a fully merchant market in Alberta. We're on track to meet this goal in November and continue to be comfortable with our current debt levels.

On Slide 11, I'll provide an update on our long-term contract and hedging levels.

Year to date, we've realized \$437 million of EBITDA, which is in line with 2019. For the full year 2020, approximately 90 percent of our EBITDA has been realized to date or is contracted or hedged for the balance of the year. We continue to manage the remaining EBITDA contribution for merchant production through hedging and optimization.

Looking at our merchant exposure in Alberta, 75 percent of our thermal baseload generation is hedged at \$53 a megawatt hour for the remainder of the year. For Q3, we are fully hedged in our baseload

generation, which provides the Company protection from the near-term fluctuations in power prices related to the COVID-19 pandemic and resulting weaker energy demand.

As we look to the final quarter of 2020, we are opportunistically adding additional hedges and are closely monitoring the recovery in power prices to take advantage of this on our open exposure. At these current hedge levels, we estimate that a \$1 change in Alberta power prices would result in an approximate \$2 million change in EBITDA.

Given the unprecedented impact of demand in Alberta, we currently expect EBITDA to be at the low end of our guidance range. This is primarily driven by the limited ability to sell additional merchant megawatt volumes into the market until the economy fully recovers.

At the same time, we also expect sustaining and productivity capital to be at the low end of our range, as we've been able to respond with adjustments in our capital investment plans. These reductions combined with our year-to-date results give us confidence in achieving our full year free cash flow at the midpoint of our outlook.

Before I close off my section, I just wanted to summarize the strength of the quarter.

The performance of the business and our people over the last three months demonstrates exceptional performance, a strong commitment, and significant resilience. Our business model and operating practices came through Q2 with flying colours, and not only are we able to see that in the health of our employees, but also in the health of the Company. As we look forward, we have confidence that our business operations and portfolio are well-positioned to respond to the challenges and opportunities that lie ahead.

Given our ability to navigate the impact of this pandemic and delivery of our cash flows, we have every confidence in our business model as we look towards the back half of 2020 and into 2021. Our

strategy is on track and can be completed with little delay and within the financial resources we have raised to date.

With that, I will pass the call back over to Chiara to start the Q&A.

Chiara Valentini

Thank you, Todd.

Chris, would you please open the call up for questions from the analysts, then the media?

Q&A

Operator

Certainly. Ladies and gentlemen, in order to ask a question, you will need to press *, and then 1 on your telephone. Please stand by while we compile the Q&A roster.

Our first question comes from Rob Hope with Scotiabank. Your line is open

Rob Hope — Scotiabank

Morning, everyone. Just want to follow up on your comment about bidding behaviours into 2021. Just taking a look back at Q3 and I guess year to date in 2020, we are seeing some of the Balancing Pool units dispatched more than I would've expected. So do you think these are currently being bid economically? And do you think there will be a large shift in 2021 with the new directions?

Dawn Farrell

Yeah. Let me start with that and then Todd and John can jump in, because it's something we've been looking at closely. I really can't comment on what the motivations are of the Balancing Pool. They do have, when you look at the structure of the PPAs they have, remember, those PPAs were set up in 2000

and so they really do have quite a different economic signal in them than what it looks like when you actually return the PPAs back to all the owners.

So what we've looked at is a couple things. You return everything back to the owners and, effectively, people do have to recover their costs and they have to recover a capacity payment somehow in the market, and they have the right to recover the capital that they've invested.

People have forgotten that the original PPAs did not have recovery of sustaining capital in the last five years or so. And the theory at the time was that if the generators wanted to continue to reinvest towards the end of the PPAs, it was really on their dime to do that reinvestment, to set up the units for the coming market.

So if you put that all in a big pot and stir it, what it really means is, as everybody gets their PPAs back, they really start to bid the proper cost structures into the market, the proper return. So of course, there'll be a competition for what that return might be, depending on supply and demand conditions, but we finally get the full fundamentals of that energy-only market.

So we've done a lot of analysis on that and when we look at that, that's where you start to see things like the impact of a \$40 carbon price comes into effect. And then you also see that kind of generally, the generators all have pretty similar cost structures. So at the end of the day, they're all going to be equally motivated to ensure they get their costs out of the market. Does that make sense, Rob?

Rob Hope

Yep. That's great. And then the follow-up question. Just how are you thinking about deploying the capital? You have a bunch on the balance sheet; you've got Pioneer coming in soon. When you look at the stack of opportunities in front of you, how do they rank? Could we see you do some contracted or

merchant renewables in Alberta? Further cogen M&A development in the US? How are you thinking about deploying capital?

Dawn Farrell

Yeah. I mean, there are some really, really interesting opportunities that we're seeing in the marketplace. I mean, we're generally quite focused on serving—as you know, we don't retail power; we sell to retailers. But we're really quite focused on the large commercial and large industrial sector.

And just through the pandemic, I think people have often wondered whether or not the ESG framework will remain or will it get kicked aside. And what we're seeing is, investors are even more—they find it even more important to ensure that they reduce the risk of what the science may bring, which means that all companies are focused on, how do they create some sort of path towards lower greenhouse gas emissions.

And so we see opportunities here in Alberta with our large oil and gas customers. We see a lot of opportunities across the United States; almost everywhere we go. Even this having Amway as a customer, it's pretty cool. These guys, they're growing their businesses based on what they see is the future and, of course, as a result of doing that, they want to make sure that they've got power behind that business that's sustainable. So lots of opportunities here in Alberta, but also in the US.

Rob Hope

All right. That's great. Thank you.

Operator

Our next question is from Patrick Kenny with National Bank Financial. Your line is open.

Patrick Kenny — National Bank Financial

Yeah. Good morning. Dawn, maybe just a follow-up on the capital allocations. So you've had success in signing up the big corporate off-takers for renewable capacity. Curious, your thoughts on being able to leverage off your existing relationships with Microsoft and others to potentially accelerate your clean energy transition and take advantage of the strong growth being experienced across the tech industry. Then I guess if internal capital is a constraint, to take advantage of that growth, how you might think about putting in partners or other external sources of capital.

Dawn Farrell

Yeah. So couple of comments on that, Patrick. So first of all, one thing you want to look at when you look at our Alberta portfolio is we actually have—there's not a lot of green power here in Alberta and we've got most of it. We've got kind of 90 percent of it between our Hydro and our Wind assets.

And of course, when we're finished with Sun 6, we have a way to back it up with clean gas. So that is something that we really see as a big opportunity for existing customers that we've got long-term relationships with here in Alberta. That's number one.

Number two, when you look at the Microsofts and the tech industry, they are highly sought after. Everybody and their dog wants a contract with Microsoft. So those returns tend to be bid really, really thin. Not that we don't want to compete there, but when you're thinking about capital allocation like you are, you want to go where your highest returns are.

And typically, what we're finding is—go back to our little Michigan project which everybody goes, why do you want to invest US\$27 million in a company like that, blah blah blah, it's too little. And I'm looking at it, going, yeah? Behind that is a really big supplier of products to the market in Amway. And if we could capture them as one of our—if we became their preferred supplier on green electricity, that's a massive move for us.

So as we look at the customer business, we are starting to really partition and say to ourselves, who actually needs us the most, who needs our skills. Because our skills are our combination of how do you trade energy, how do you build new energy, how do you bring green credits and offsets, how do you understand the regulations around offsets, how do you bring that whole mix together and then provide something to your customer. And we find, actually, the industrials who are retooling their businesses to be better prospects for us because they need us more. And most people aren't focused there.

Patrick Kenny

Okay. That's great, Dawn. And maybe just a follow-up for Todd. You mentioned the Alberta merchant contributions continued to represent a smaller portion of overall cash flows, but I guess this looks to be putting some pressure on your de-consolidated leverage ratios. So until power prices recover, there might be a delay here in getting down to that sub-3 times target. Just wondering, does that impact at all the priorities with respect to dividend policy, share buybacks, or debt repayment as you look to refinance that '22 bond coming up there?

Todd Stack

Yeah. No. I would say, actually, no change to any of our capital allocation plans that we talked about, I think it was last September, we announced on our de-consolidated basis.

You are correct. Although I think our de-consolidated cash flows are actually very strong, and stronger than they were prior quarter or as it compared to 2019, what we're really looking at is reinvestment in the Coal to Gas is consuming some capital right now, and so we really need to get through some of that program. And similarly, we will see higher de-consolidated free cash flows once the hydro comes off PPA at the beginning of next year. That'll be a significant contribution to that de-consolidated cash flow.

Patrick Kenny

Okay. Great. Thank you very much.

Dawn Farrell

Thanks, Patrick.

Operator

Our next question is from Ben Pham with BMO. Your line is open.

Ben Pham — BMO

Okay. Thanks. Good morning. Just question on the hydro PPA that expires this year. As you go into next year, the production from that facility, is that going to be part of your hedging program with some of your storage/run-of-river? Or is it going to be mostly open exposure?

Dawn Farrell

So I'll start and then John can add. I mean, you've got to think about that hydro as several different streams of revenue. But if you're just thinking about the sort of energy component and the capacity, remember that in the spring, there's big runoffs. We never know quite when it is. We never know if it's going to be in April, May, or June. It depends. In Alberta, it's been 30-above at the end of April and sometimes it's a cool spring and the runoff doesn't come until June. But net-net, that energy that comes, it's more run-of-the-river, it's more energy, and it is—some of it is hedge-able in our program.

John Kousinioris — Chief Operating Officer, TransAlta Corporation

Yeah.

Dawn Farrell

And then there's the storage component of it, which is really what we use for both ancillary services and then selling into the market when, like last week, when the market was really high. Our hydro

loves those days, right? So the asset optimizers do a lot of risk probability assessments and then they decide how much they're going to hedge.

Maybe, John, do you want to add to that?

John Kousinioris

Yeah. No. I mean, I think that Dawn answered it well. There is a component. I think of it as a strip, effectively, of the—

Dawn Farrell

Yeah.

John Kousinioris

—anticipated generation that we have through the year that we do view as being baseload-like, if I can use that sort of expression. It would factor into the work that the optimization team does from a hedging perspective for sure.

Ben Pham

Okay. Great. And anything with some of the Brazeau Pumped Storage Project that [gained a lot of legs (phon) about a year-and-a-half, two years ago. Because there's been some activity around TC Energy partnering (phon) in Alberta and some stuff going on in Ontario. But would love an update there if there's anything.

Dawn Farrell

You must be in the walls at TransAlta, are you, Ben? So everybody knows that Brazeau is the CEO's favourite project and she's going to find some way, come hell or high water, to figure out how to make it go. Because when I look ahead, Ben, what I see is you have to go—and over 20 years, it's not going

to happen tomorrow—but over 20 years in Alberta, you've got to go from natural gas and renewables much more towards storage and renewables.

To me, if the truth is that Canada as a whole is going to go after net-zero by 2050, Alberta produces the most greenhouse gasses. Our oil and gas industry needs us to find the cleanest way to produce electricity so that they can continue to sell oil and gas. So we do think Brazeau is in the mix there.

So we continued to work behind the scenes on it. Part of it is, as you know, it's challenging to get people's attention on a project that won't be ready for seven years. So we've got some really cool ideas about how we can maybe create some sort of picture between now and seven years with some of our existing assets on our way to—on the road to Brazeau.

So it's not dead, but it's certainly not something that we're talking about with investors or really putting out in the front lines because we want to make sure that it is also competitive with other things that people will be thinking about. People will be thinking about how to put hydrogen, for example, into the gas stream at our plants. Because if we can do that, you get some greenhouse gas reductions.

We've resurrected the files on CCS. So for example, if K1 is our next combined cycle plant for 2025, maybe we should be thinking about K1 having carbon-capturing storage on it so that we can sell really clean energy to the oil and gas sector here.

We're also looking at other—we've got a little program where we've looked at almost every kind of battery storage that there is, and there's some really interesting things going on with different technologies there. So we've basically got a little team that's lined all of that up. We're looking at how Brazeau would fit into that, what the timing would be.

And then a final thing about Brazeau. I think if Canada's going to build infrastructure coming out of this pandemic as a way to get us out of the mess that we're in here, something like Brazeau is what I

call productive infrastructure. It actually creates value and long-term streams of income to investors and long-term employment for people, and it also would create a tax stream for governments. So I think the time is now to get that kind of infrastructure funded.

So we've got all of that on our minds but certainly nothing announce-able, Ben, but lots of work going on behind the scenes as we think all that through relative to our future.

Ben Pham

Okay. And maybe my last one—

Dawn Farrell

That's probably more than you wanted to hear.

Ben Pham

No. It's great to think about these things, especially a 10-year sort of development cycle for it. And maybe for my last question there, Dawn, on that. When you think about the market 7, 10 years from now, you have very tight supply/demand conditions at that point of time. I guess the status quo has always been just building new gas generation at that time to replace the Coal to Gas Conversions?

Dawn Farrell

Yeah.

Ben Pham

But do you think it's—whether you're talking about hydrogen and renewables—do you think maybe that might not be the status quo? That it's going to be more renewables, more storage, more of that maybe pumped hydro in that mix over gas?

Dawn Farrell

Yeah. So the way I tend to think about it is, if you look at net-zero by 2050, that's 25 years from 2025. And when I look at converting K1 to gas, I think you've got to be prepared, and I do think that's a fantastic investment. As you know, it's similar to what we're doing on Sun 5. And as you know, I've said before, any gas conversion has to be really capital-conserving because you've got to get your capital back through the time frame.

So if I look at K1, like I say, as a potential combined cycle plant, the question I've got in my mind is, will it be one of the last combined cycle plants built. And will we build it actually with carbon capture and storage so that it lasts beyond 2050?

Now typically, a gas conversion is about a 25-year. So I think what the team is doing here is we're saying, okay, what are the gas projects that can go to 2050. How do you get them past 2050; you have to put CCS in place. And then what starts to replace it.

Now I can say—I unfortunately have been in this industry far too long—that the cost of things like nuclear—people are talking about nuclear, and I'm like, oh my god. It is very, very costly. It's \$200 a megawatt hour. I do not want to put that on my grandchildren. So when we look at hydrogen, hydrogen's very expensive right now. But 20 years ago, wind was, as you know, it was \$200 a megawatt hour; today, it's \$40. So 20 years is a long time.

So I do think we want to be very, very careful as a company in what those investments look like in gas on our way through the 2020s. And I would predict that the group that's here at the end of the 2020s will be working really, really hard on those storage options, because I think renewables are pretty abundant. Wind is pretty abundant in Alberta.

And there are some other ways to do hydro here. We've got a whole—we pulled out, as you know, the whole file of hydro projects that the Company was looking at in the '50s and they put aside

because they thought they would go to coal. So some of those would come back. Now new hydro's really hard to permit as well.

So I think you're right on the money. As we go through the decade, gas will start to fade away and other things will start to come into play. But it takes customers who are willing to partner with us on those kinds of projects, because in this market, you can't build a Brazeau in a merchant market using merchant risk. You have to have some partnerships on that. So I think that will be the other thing that will emerge as we go through the decade here.

Ben Pham

All right. That's great. Thank you, Dawn.

Dawn Farrell

Thanks, Ben.

Operator

Our next question is from Maurice Choy with RBC Capital Markets. Your line is open.

Maurice Choy — RBC Capital Markets

Thanks, and good morning. I guess just to follow up on that big-picture, long-term discussion that you just had. Does that mean that unless you get an answer about all these new technologies having the costs come down significantly, you are quite unlikely to make a decision on K1 and possibly even Sun 4, at least in the near term?

Dawn Farrell

Yeah. No. I would say, again, if you look—remember, we're an 85,000 gigawatt-hour market here today. And even if it doesn't grow our gross at sort of 1 percent, the current simple conversions that are in the market, they only have 15 years of life; some of them less because of regulations. Right? So even as

you're going forward through the '20s, you're going to have to replace some of the supply. And so I'm very bullish on K1 and potentially Sun 4 as repowering options because they're effectively replacing supply as you go later into the decade.

And as you rightfully pointed out, when you start to look at around 2026, a number of people are looking at supply tightness. And our job is to make sure that our low-cost resources get into the market so we can keep prices low here for our customers. Because Alberta is not competitive unless power prices are low, and that's just a fact. And you've got to be able to make money in those price ranges. So I think those still continue to be good candidates.

But as we look at the mix going forward, we may add some investment on CCS. Because if you look at the carbon market, if carbon's going to \$50 and beyond, if you look at the Clean Fuel Standard which has an implied carbon price of \$350 in it, all of that says that the carbon market itself starts to dictate the way you think of your investments. So we can see ways of making returns on greener and greener assets, not just by selling gigawatt hours, but by selling clean gigawatt hours.

So gas can be very, very clean and in fact, it's very, very plentiful here in Alberta. And the trick is, how do you either turn that gas into hydrogen or how do you turn that gas into greenhouse gas-free gas by doing CCS.

So those are the kinds of considerations that we're making. And luckily, we've got a great portfolio of assets as sort of our starter kit to attach those investments to, for our customers.

Maurice Choy

And I guess just to pick up on, I think there was a comment earlier from Todd that usually power prices settle at around \$60 per megawatt hour. Does that mean that, as you think about all these projects, you model or you underpin it with the \$60, if not a higher-than-\$60 power price?

Dawn Farrell

Yeah. You know what? And I think, as you think about your portfolio and your mix, first of all, \$60 today has pretty low returns in it relative to the cost structure that's underneath that, because the cost structure that's underneath that has to incorporate a future view on carbon. And as you all know, the tier today allows gas to really, effectively, get off the hook, especially combined cycle gas, for paying any carbon bill at all.

We do expect as we go forward that that will go away. I expect, over time, anybody who's looking at returning capital over 20 years has to be looking at natural gas having more and more of a carbon price associated with it.

So when I think about \$60, I often think backwards, without a carbon price in it. When you start to put the carbon price in it, it might go up a little bit. It might be \$70, \$75, whatever. But it doesn't mean that the returns are higher. It just means that the cost structure underneath it is higher.

My bet is, the way technology has worked, I mean, when we bet on wind in 2000, most people thought we were absolutely stark-raving mad. When we built our Wind portfolio, you all know, I had more questions on the Street about selling the wind than I ever did about investing in it. I had more people yelling at me for investing in wind farms than I did supporting us. But net-net, as you look ahead, there's going to be a lot of wind on this planet and a lot of returns are going to be associated with that.

So I think the job of the industry is to keep prices in that \$60, \$70 range as long as they can, because it turns out no one wants—you've got to have low-cost electricity to be competitive. And especially, if you electrify everything that you can, it's even more important.

So let's say the oil and gas industry here started to go for let's say electric boilers; very, very expensive, but something they may be thinking about as they look at their own ESG goals. We have to come underneath that and provide them with low-cost power.

So I absolutely do not subscribe to a world where you charge people a ton of money to provide them electricity because it's green. Our job is to be innovative and get the cost down.

Maurice Choy

Speaking about clean energy, can you update us on your thoughts on dropdowns to TransAlta Renewables? Their preference for transactions—

Dawn Farrell

I'm going to—

Maurice Choy

Sorry. Go ahead.

Dawn Farrell

Yeah. So I'm going to let John take that one.

John Kousinioris

Yeah. Maurice, we continue to have discussions between TransAlta and TransAlta Renewables about the potential for dropdowns. I think we've been—I think people have a sense of what that group of assets are that would potentially be with the right attributes for a dropdown. And all I can tell you is that we continue to work and have those discussions as we go forward in the year.

Maurice Choy

Thanks. And just a clean-up question about line loss or transmission line loss. Todd, you mentioned \$20 million net liability, I believe. Can you let us know what is the cash flow impact, at least

for the upcoming quarters? And is that kind of expected to be adjusted out from contingents of your guidance for free cash flow?

Todd Stack

Maurice, I'm having a hard time hearing you.

Dawn Farrell

So. I—

John Kousinioris

We're having a hard time hearing you here.

Dawn Farrell

—Maurice, I think your question—and we'll have to make this your last one because we've got to move to Andrew—but I think your question is, what is the cash flow impact of the line loss settlement?

Maurice Choy

Correct. And whether or not that affects your guidance for free cash flow?

Dawn Farrell

Yeah.

Todd Stack

No. It doesn't affect our guidance. We've built some of that settlement into our plan. So we do expect to settle roughly a third of that this year and then the remaining portion of it at some point in 2021. But that's been built into our forecast.

John Kousinioris

Yep.

Maurice Choy

Great. Thanks.

Dawn Farrell

Great. Thanks, Maurice.

Andrew?

Operator

The next question is from Andrew Kuske with Credit Suisse. Your line is open.

Andrew Kuske — Credit Suisse

Thanks. Good morning. I appreciate the commentary and the perspective on your outlook for power pricing and just bidding behaviour. I guess a question more directed at TransAlta is, bidding behaviour's going to change in the market as the market transitions. But how do you look at your Energy Marketing business? And how does that morph and change with the new market reality in Alberta?

Dawn Farrell

Yeah. So, Andrew, are you thinking about that being more—so I think a simple way to say that is, our Energy Marketing business has kind of run a—always had a little separate book that they've had. And the reality is, as you see, as we bring on all these assets that are all merchant, it's really their expertise that helps us optimize around that. So I think they'll continue to be the big value adders in how we look at the market here.

And I think, at the end of the day, they don't really need to be taking any real risks themselves in the electricity market here in Alberta because we've got all these assets that we've got to trade around. So they'll do like what they do at Centralia. They'll trade around the assets and, at the same time, provide a lot of asset optimization for the portfolio.

John, do you want to add anything to that?

John Kousinioris

Yeah. No. All I would say is, I mean, your question is a timely one in the sense that it's a very active discussion that we're having—

Dawn Farrell

Yeah.

John Kousinioris

—internally. As you can imagine, our whole—the way we're thinking of asset optimization is being reviewed and we're getting prepared for the merchant market in 2021. So the balance between what you would do to, kind of from a prop trading perspective in Alberta, versus what we would be doing just in terms of—

Dawn Farrell

Yeah.

John Kousinioris

—the hedging that we're looking at doing for the larger fleet is a balance that we're continually assessing now as we go forward.

Dawn Farrell

But Andrew, if you're worried about how they'll do as a separate little business going forward, they have really diversified away from Alberta.

John Kousinioris

That was my next—

Dawn Farrell

Yeah. Go ahead, John.

John Kousinioris

So, Andrew, when you look at what the actual floor is doing, I mean, Alberta is probably kind of 15 percent of the way we think of kind of if you look at it from a targeted perspective in terms of cash contribution, it is less than a fifth of the way that we think of the various depths that we have in the consolidated group.

Todd Stack

Yeah.

Andrew Kuske

Okay. That's great. I appreciate the colour. And then—

Dawn Farrell

They are—go ahead.

Andrew Kuske

—maybe my second question really just revolves around your Kaybob opportunity. That's a very interesting opportunity and it's a very interesting business group. How do you think about just the risk management across the Alberta-BC border? Because obviously, there's different markets and different behaviours on counterparties across the border, as we've seen in the last few months. So how do you think about just the size of the opportunity in Alberta? And then also in BC?

Dawn Farrell

Are you thinking about BC Hydro trying to attract everybody there because of all of the power—because of their hydro power? Is that what you're—sorry. What?

Andrew Kuske

Well, I'd put the BC Hydro behaviour a bit differently as far as what they've done with some contracts they have in the market. But when you think about cogen opportunities like you're doing with Kaybob, because that's—

Dawn Farrell

Yeah. Yeah.

Andrew Kuske

—an interesting business mix. Clearly, those opportunities exist on the other side of the provincial boundary.

Dawn Farrell

Oh, yeah, yeah, yeah, yeah.

John Kousinioris

Yep.

Dawn Farrell

Yeah, yeah, yeah. Yeah. I think, typically, the cogeneration opportunities emerge always because of the high steam and processed heat demands. So it is interesting, though, because there's a lot of surplus power coming out of BC, and I think they've been able to market some of that into some of the developments that have been going on in BC.

But net-net, as we work with customers, it's any customer anywhere in Canada, anywhere across the United States, anywhere in Australia that has the requirements for either behind-the-fence gas, which is what a lot of our Australia guys have, or behind-the-fence steam. We market to all of that.

Todd Stack

And we've packaged full-service behind-the-fence products as well, a combination of renewables with gas, with steam—

Dawn Farrell

Yeah. That's—

John Kousinioris

And the hybrid, that's the last piece that's really taken off here, to Todd's point, is exactly that.

Dawn Farrell

Yeah. Like we're seeing, for example, in Australia, which is completely—we're gobsmacked by it, actually. But if you look at the Australian mining industry, they all have the SG goals.

John Kousinioris

They do.

Dawn Farrell

So we're seeing people now talking to us about providing them with some solar power at the same location where they'd have a gas plant. So some really interesting things emerging there as well.

Andrew Kuske

Okay. That's great. If I could maybe sneak in one last one just on that point. How big do you think that market opportunity is for you? Because you've had the footprint in Australia for years. How much incremental—

Dawn Farrell

Yeah.

Andrew Kuske

—do you think you can do there?

Dawn Farrell

Yeah. I think it's—so the way we kind of look at it always, Andrew, is, we love singles, as you know. We don't need billion-dollar investments. We like to play singles and doubles, and occasionally a triple, which you'll see sometimes as well, but.

So when we look at the Australian market, what we're seeing right now is singles, bite-sized, \$100 million, \$150 million. And if we can get three singles a year, \$450 million, \$500 million a year going on a sustainable basis, that's really what this company needs to grow.

And we like singles and doubles because they tend to—you don't get yourself all hung out on one customer, one deal, and there's a lot of issues that go along with that. We like the diversity of the customers and the different fuels. So Australia will give us a couple of those \$100 million to \$150 million investments over the next five years.

Andrew Kuske

That should keep you hitting above \$300 million. I appreciate that. Thank you.

Dawn Farrell

Yeah. I know. I know. That's what Brendon tells me all the time. If you can just hit it—it was Ichiro at Seattle. He just hit every time. Right?

Operator

Our next question is from John Mould with TD Securities. Your line is open.

John Mould — TD Securities

Morning. Maybe just going back to a bigger-picture Alberta market question. So there's been talk of a federal clean energy stimulus. Certainly, nothing concrete has come of that at this point. We've seen a number of market-driven renewable projects in Alberta. And just when you're thinking about the

Sun 5 repowering, how do you think about the potential for let's say out-of-market supports for renewable growth and the impact that can have on the market? And that could be a big benefit for a project like Brazeau as your pumped storage, as you were discussing earlier. But just wondering how you think about the impact of a potential push to green, Alberta's electrons, on the returns from an investment like Sun 5 and what it can earn in the energy market?

Dawn Farrell

Yeah. So can I separate? I'll separate for you Sun 5 and Sun 6, right, because Sun 6 will be gas by the end of this year. So one's a peaker and one's a combined cycle energy project.

So when I look at a combined cycle energy project and I look at the way the carbon tax works right now and the tier program works, it just gets in there and gets its money, period, so. And it doesn't care about volatility. If prices are high, it gets that margin. If prices are low, it gets that margin and it runs.

So when we stress test and pressure test what the market can look like, that's still an excellent-returning project because of the capital, is lower than what you'd have to do if it was brand-new.

If you take the Coal to Gas Project—this is going to sound odd to you—but it actually does better because, effectively, you create massive volatility in the market. So think about it this way. Let's say you had another—just magically woke up tomorrow morning and another 1,500 megawatts of supply of wind showed up in Alberta, and now you've got 3,000—let's say you get 3,000 megawatts in an 11,000, 12,000-megawatt market. Well it turns out all that wind is in the same place. It all blows one day and none of it blows the next day. The prices are going somewhere between \$0 and \$500, and a peaker captures those margins.

So the real issue is whether or not those peakers can get started up pretty quickly. And John and his team have done an amazing job on that. So net-net, it turns out that in a renewables market here in

Alberta, you have to back it up with something. And in absence of things like Brazeau, you need fast-acting peakers.

The other, of course, big benefit that our peakers have is they're able to fully ramp all the way. They don't have any restrictions. And I think, under the federal rules, brand-new peakers are restricted to only running 30 percent of the time. So that's pretty hard to make money on.

So I think, net-net, what we're looking at is, the volatility works for the peakers and the cost structure works for the combined cycle plant over a range of options. And when you bring in more renewables, you create more volatility.

John Mould

Okay. Thanks for that context. And then Todd referenced the MSA statement, I think, earlier on economic withholding. Are you anticipating any additional guidelines related to economic withholding or offer behaviour from the MSA? Or with the AESO having completed its market power mitigation rule with you earlier this year, are you expecting a stable bidding framework more or less—

Dawn Farrell

I—

John Mould

—for the foreseeable future?

Dawn Farrell

I've got Kerry—yeah. We've got Kerry O'Reilly Wilks here who runs our regulatory, so I'm going to turn it to her.

Kerry O'Reilly Wilks — Chief Legal, Regulatory and External Affairs Officer, TransAlta Corporation

Sure. So we don't anticipate any new guidance. But that being said, we weren't necessarily anticipating the most recent statement. So I think as we enter into a pure merchant market and the Balancing Pool falls away, I would suspect that we'll find that we'll receive more principles issued by the MSA in terms of going forward.

But we believe that the market is stable. It's been confirmed that with fair, efficient, open, competitive (unintelligible) regulation, we have what we need for the market to run properly and provide stability. So we don't anticipate anything brand-new coming out.

Dawn Farrell

Yeah. The only colour I could potentially add is, one of our board members, Yakout Mansour, was the head of the ISO in California. And he did say to me once, he said, look it, your market's been designed for PPAs. The rules are set up relative to the PPAs. As you come out and the PPAs come off and you go to bidding your costs and having to get a return and a capacity payment out of the market, there might be some rule changes that are going to be required to make price formation as strong and as robust as it can be. Because as Todd said, the whole thing now, the whole market hangs off of really, really strong price formation in that spot market.

So we don't know yet what that could be, and Kerry and her team will be working sort of side by side with the ISO to see if there are any changes that are required as we go down through that. But what I find generally is those kinds of rule changes are very technical, very hard to understand. It takes a PhD in power economics and math to understand what they're really trying to do. So I think we could see some of that.

But the main pieces of the market have really been set. And when they did that, when they issued that guidance, they put the final icing on the cake around how the energy-only market could trade

so that, effectively, it can give the signals for capacity, which I think is really important and very positive for our strategy.

John Mould

Okay. Thanks for that. I'll leave it there.

Todd Stack

Thanks, John.

Operator

Our next question is from Mark Jarvi with CIBC Capital Markets. Your line is open.

Mark Jarvi — CIBC Capital Markets

Thanks. Good morning, everyone. Just maybe coming back to TransAlta Renewables. We've seen a big premium come in for pure-play renewables. So I'm just wondering how that might influence what you're seeing on valuations in the market in terms of how you shape future dropdowns at RNW, if that changes your willingness to maybe put gas-fired assets into that entity or keep that split at 50/50 as it is now.

John Kousinioris

Yeah. I mean, I think it's fair to say, Mark, that we're relatively opportunistic in terms of what would go down from a dropdown perspective. The Company's strategy is a balanced one. We do have a focus on developing our renewable business and we do think we have runway on on-site generation.

So as we develop both of those kinds of assets, we think that both of them are valuable. I know that different multiples are assigned to each of them. But we would be looking at both of those categories as being things that, once we had projects, would be good candidates potentially for RNW.

Mark Jarvi

Okay. And then just coming back to the Alberta power market and future supply, there's some speculation of a combined cycle plant might get financed and move into market. I'm just wondering how that might alter your plans for your Coal to Gas Conversions around either going to repowerings or delaying any of the boiler conversions until you see what that entity does with that project.

Dawn Farrell

No. No delay whatsoever.

John Kousinioris

Yeah. No change to our approach.

Mark Jarvi

Okay. And then last one here is, maybe it's not even feasible. But given your expectations of where prices need to settle next year, some soft demand this year, is there any way to shuffle around planned outages? Or even just advance either K2 or K3 boiler conversions?

Dawn Farrell

Well, first of all, we can't talk about that because it has to go to the market overall—

Mark Jarvi

Right.

Dawn Farrell

—at the same time. So all I would say is, my expectation is that as we—and this is just my expectation—as you start to come out of the pandemic, as the numbers start to drop, as people actually figure out that all you have to do is wash your hands, stay two metres apart, and wear a mask when you can't, and as the kids come back to school, I think some of the hysteria will move out of all of this and you'll start to see things climb out.

And we're certainly seeing that week by week here in Alberta. Traffic's getting heavier and heavier every day through the summer, which is quite unusual. Usually, the traffic stays—it's pretty good in the summer.

So I think demand, you have to expect that—and we're starting to see the curtailments on production going away on oil. So I think as demand lifts here, how things are set up next year makes sense.

John Kousinioris

Yes. We're—

Dawn Farrell

And the other thing is we've got to get equipment and people and—

John Kousinioris

Yeah. That's what I was just about to say, Mark. The amount of advanced planning that—remember, these are out of just plus conversions, so the amount of planning that goes in, as we're thinking of Sundance 6, for example, there's hundreds of people that are going to be on site working on the facility to both do the outage and do the conversion. So just logistically, it's not something you can toggle all that easily. So it's a lot of planning and—

Dawn Farrell

Yeah.

John Kousinioris

—timelines.

Dawn Farrell

I think, the other thing—

John Kousinioris

|—

Dawn Farrell

—people are going to realize that all over this country, in facilities everywhere, people are building stuff and operating stuff, and nobody's getting sick because they're all using very simple protocols. And hopefully, that commentary is going to start to dominate the airwaves here pretty soon.

Mark Jarvi

Okay. Thanks for clarifying. Appreciate it.

Operator

Again, ladies and gentlemen, to queue for a question, it is *, 1 on your telephone keypad.

Our next question is from Naji Baydoun with Industrial Alliance Securities. Your line is open.

Naji Baydoun — Industrial Alliance Securities

Hi. Good morning. Just a quick question for me on the topic of repowerings. Can you give us your thoughts on when you're repowering, particularly for some of your older wind assets? Is that something you could potentially be pursuing over the near term?

Dawn Farrell

Yeah. And, Naji, thank you for, first of all, being so patient to wait all the way to this time to ask that question. And it's a great question.

So as we look at wind repowerings, we've got some of the earliest wind sites which have got really great resources for wind. Typically, a lot of people will tend to put—we're pretty conservative about what we put in as our terminal values of wind farms because we kind of look at two things. One, can you extend the contract with the landowner, and, two, can you reuse some of the equipment.

What we've mostly found is you can absolutely extend the contract with the landowner. They are desperate to keep those wind farms there because usually that's what's keeping them alive.

But the technology's changed so much. So if you look at our first wind farm, it was probably 300 kilowatts. Right? And then it went to 660. And now we're looking at wind farms that are 5 megawatts. Well, the platform for 5 megawatts is quite a bit bigger and quite a bit deeper than the platform for 660.

So typically, a repowering option is a renewal and a brand-new wind farm at that site using that resource. And you have to do a lot of work on your substation and all the rest of it. So that's how we look at it.

So typically, the number-one thing is, have you been a good neighbour, have you kept the noise low. If a door opens at the top of a windmill, did you go up and shut it as fast as you could, so you didn't keep the landowner awake all night? Have you got excellent environmental records? And are you doing the things you should be doing for birds, bats, and bees? And if you get all of that going, you'll get a long-term extension on the wind resource. But likely, your repowering is a replacement.

Todd Stack

But on top of just the repowering, we also have a good inventory of other optional—

Dawn Farrell

Yeah.

Todd Stack

—land—

Dawn Farrell

Yeah.

Todd Stack

—to build out new wind farms. And that’s sort of how the Windrise facility came out, as opposed to repowering one of our retired sites, is to actually go do a new site. Again, that’s just Alberta. Down in the US, John, I think we have 1,000. We have quite a few early-stage development sites that we can develop up as well.

John Kousinioris

And those would be all—

Todd Stack

Yeah.

John Kousinioris

—those are all new sites.

Todd Stack

And that is back along with the strategy of saying, we need to have some early-stage development sites or late-stage development sites to be able to bring forward to customers, to get their attention, and to get them in a position where we can actually execute a contract and PPA.

Naji Baydoun

Okay. That’s great detail. Thank you. And just, I guess, do you have a target kind of similar to the cogen strategy of a certain amount of capital that you want to be investing in these types of opportunities? And if you do proceed with some repowerings, are the returns that you’re targeting there similar to new build?

Dawn Farrell

Oh, yeah.

Todd Stack

Absolutely.

Dawn Farrell

Yeah, yeah. Yeah. And again, if you kind of sit back and say, okay, can you find enough things to do in the jurisdictions we're in, in the technologies that we love, to get you on a path where you're investing in that \$450 million, \$500 million a year on a consistent basis, the wind kind of fits in that. But net-net, if wind is a lower return than cogen, we're going to do more cogen than wind and vice versa. So it really comes down to, can we get the right prices for the investments that we make.

Naji Baydoun

Okay. Thank you for the great detail.

Dawn Farrell

Yep. Thanks.

John Kousinioris

Thank you.

Operator

Our next question is from Chris Varcoe with Calgary Herald. Your line is open.

Chris Varcoe — Calgary Herald

Hi, Dawn. I'm sorry if this question's been asked. I just jumped on the call. But I was curious about the WindCharger battery storage project. Can you talk about how the construction has gone? How the costs have gone on this project? And whether they've met your expectations? And maybe, more importantly, what are you going to be watching for as the keys for success in this project?

Dawn Farrell

It's pretty cool, Chris. Actually, I'm going to give it to John because it's his team that's done it.

But go ahead, John. Yeah. It's so cool.

John Kousinioris

Yeah. Hey, Chris. It is really cool. And we get pictures of it from time to time from our crew down there, and we're excited to have it. It is essentially all in place. We're just doing some testing on the transformers. The costs were pretty much right on top of where we thought. The timing was pretty much on top of where we thought, notwithstanding the thickening of the border and COVID adding some—

Dawn Farrell

Yeah. But talk about when you started the construction and when you're going to end.

John Kousinioris

Well, we're going to end it in a couple—I mean, it's basically there. We're more in a testing phase. But it was put together in just a matter of months, to be honest—

Dawn Farrell

Yeah.

John Kousinioris

—in terms of construction. And it was great when we saw the batteries coming up from Tesla and in place, so.

And I think, Dawn, you and I were right by there just a couple of months ago—

Dawn Farrell

Yeah.

John Kousinioris

—and there wasn't a lot there. And in literally two months, it's basically done.

We are excited about it. It's an opportunity for us to kind of match storage and our renewables wind power generation. It's tied to a wind farm that we have there. So we're really looking at learning from tying the two together and just seeing how it'll operate to fill in kind of peaks of demand in the marketplace and sort of a time shift, effectively, the generation that we have from the renewables to times when it would be potentially more valued. So it's a—

Dawn Farrell

Yeah.

John Kousinioris

—good project.

Dawn Farrell

The marker for it, Chris, is, so very simple, very fast to put up—

John Kousinioris

Really quick.

Dawn Farrell

—very easy to permit. I mean, we were standing in a field, looking at a field one day, and the next day, we got the pictures, and the batteries had been brought up by—

John Kousinioris

Yeah.

Dawn Farrell

—truck and were sitting on where they were supposed to be.

John Kousinioris

It's about half the size of a soccer field—

Dawn Farrell

So you—

John Kousinioris

—to just kind of give you a sense.

Dawn Farrell

If you're in our industry where it takes forever to get anything done, it was kind of remarkable.

But the real challenge will be, will it make any money. Because you store it for about two hours—

John Kousinioris

Yep.

Dawn Farrell

—and then you've got to undo it when the prices are higher. So you're time-shifting the value of energy, and at the end of the day, it's got to pay for itself. So we'll be able to—we won't know for about a year or so whether or not it creates that value in the market here. But certainly, it's been a pretty interesting project to be involved in.

Chris Varcoe

Just a follow-up. Can I ask you, what do you see as the potential for battery storage, given the current technology? And what do you see as the limitations at this stage that really need to be overcome?

Dawn Farrell

Yeah. So in our industry, the limitation's always the capital, the size of the capital that you need to make the initial investment, relative to whatever the price differential is you're going after.

So the way batteries work, Chris, is you need a fairly good differential between periods. So you need a low-price period—

John Kousinioris

When you're charging them.

Dawn Farrell

—so that you can charge, and then you take the power out of the battery when there's a higher price.

Alberta's a little bit tougher than most jurisdictions because we have such a high system load factor. We need power 24/7. You don't get as much day and night change as you do maybe in other markets. But as more renewables come in, maybe that will change. So that's something that you would watch for.

The biggest constraint right now is the time duration. So the Tesla batteries are short-duration batteries, two hours. We're looking at batteries—our Brazeau storage project, which is pumped storage, it has about 9 hours of discharge, but it takes 12 hours to store. Right? So it takes 12 hours to charge the reservoir, and then you can run it out for 9. That's pretty good.

We're looking at some battery technologies that are kind of half-and-half. You store for about 13 hours, and it comes out for 10 or 11. Don't ask me why it doesn't all add up to 24 hours. An engineer has to explain that to me, but.

So net-net, the biggest constraint today is everybody's going after these long-storage batteries, and they've got all these different technologies. A lot of them are chemical batteries where you're adding ions to a chemical and then you're taking the ions out as you're discharging. So if you're interested in it, come over and we'll take you through a tutorial and you can write lots of stuff about it.

Operator

Ladies and gentlemen, this does conclude our Q&A period. I will now turn it back over to Chiara Valentini for any closing remarks.

Chiara Valentini

Great. Thank you, Chris.

Well, thank you, everyone. That concludes our call for today. If you have any further questions, please don't hesitate to reach out to the IR team here at TransAlta. Have a great day.

Operator

Ladies and gentlemen, this concludes today's conference call. Thank you for your participation, and you may now disconnect.