

Letter to Shareholders

As I sit down to write this letter, we are halfway through our transformation to become a leading clean energy company. For the past 65 years, TransAlta has focused primarily on the development, construction and operation of coal-fired generating plants, fueling the growth of the communities where we operate. Almost 20 years ago, the Alberta electricity market was de-regulated and long-term power purchase arrangements (PPAs) were established. Today, we stand three years into our transformation that includes converting our Alberta coal units to gas generation in response to a competitive environment in Alberta that is defined by the PPAs coming to an end, the cost of carbon becoming a reality and the anticipated capacity market being implemented in Alberta. Our coal-to-gas conversions will be completed in another three to four years, at which time we will be a largely transformed business. Our strategy is based on both the need to respond to these external changes and our focus on realizing significant long-term value for our shareholders.

Our strategy is simple: i) convert to gas; ii) realize the full value of our hydro assets; and iii) grow TransAlta Renewables. The execution steps to make this strategy a reality are known, in place and tracking.

1. The first priority of our strategy involves shifting our Alberta fleet to compete in the capacity market, primarily by transitioning the coal fleet to gas in the 2020 to 2023 time frame. Once completed, we will see our Alberta thermal fleet contribute strong cash flow to the company for many years to come.
2. Our second priority is to maintain our Alberta hydro assets as we approach the expiry of its PPA. When this arrangement expires at the end of 2020, we expect to receive the full benefit of the attributes inherent in these hydro assets, including capacity, energy and ancillary services.
3. Our third strategic priority is to support growth in TransAlta Renewables. We receive a reliable dividend from our investment in TransAlta Renewables and this investment also extends our average contract life and reduces the business risk and cost of capital for TransAlta Corporation.

With the benefit of understanding our strategic priorities, let me now outline our performance in 2018 and what is to come in 2019 and beyond.

2018 Performance Highlights

In 2018, we realized some of our best performance for safety, availability and free cash flow:

- We delivered free cash flow of \$367 million, \$56 million higher than 2017, after adjusting for the one-time payment for the termination of the Sundance B and C power purchase arrangements in 2018 and the payment from the Ontario Electricity Financial Corporation in 2017 (net of our partner's share).
- Our total injuries declined 44% relative to 2017. While this is a great result, we are still striving to see further improvement.
- We increased our co-firing at the Canadian coal unit, resulting in savings of approximately \$12 million in greenhouse gas costs.
- Availability was strong and we achieved our best availability at Sundance since 1990 and at Keephills since 2011.
- We increased cash flow from Australia from \$127 million to \$136 million.
- The hydro segment increased cash flow by \$35 million, despite lower production, representing stronger energy pricing and the higher demand for ancillary services.
- We continued to pay down debt in 2018 with a reduction of net recourse debt of approximately \$515 million. We expect to continue our deleveraging strategy over the next three years as part of our balanced capital allocation plan.

The successes of 2018 were hard-won given the headwinds of 2018:

- The net loss realized in 2018 was a result of, in part, the acceleration of the depreciation and amortization of the mine and coal assets provided by of the Off-Coal Agreement with the Government of Alberta.
- Carbon compliance costs increased due to regulated increase in the carbon price and the fact that carbon costs are no longer passed-through to the buyer under the power purchase arrangements.
- We retired Sundance Units 1 and 2 and mothballed Sundance Units 3 and 5, resulting in production at Canadian coal decreasing by over 8,000 gigawatts/hour compared to 2017.
- We realized higher coal costs on a dollar per MWh basis due to lower coal tonnage and the allocation of fixed costs across lower production - we are focused on providing the lowest cost fuel for the remaining life of the facilities.

TransAlta's performance in 2018 is particularly noteworthy given the work being undertaken to shift our cost structure and operating models to adapt to the new market and regulatory realities. This has been largely driven through our company-wide initiative known as Project Greenlight, which has produced meaningful change within the company. This includes adopting cost reduction measures, implementing operational improvements and enhancing employee engagement. Examples of this transformation include the headcount reduction of over 15% in 2018, the co-firing of gas at Sundance and Keephills, and improving equipment utilization at our mining operations. We are also focused on improving organizational effectiveness, which includes being operationally disciplined, encouraging bottom-up innovation and facilitating performance transparency. For a company that is over 100 years old, these changes do not come easily, but the success of this program to date is an indication of the company's commitment to drive value for decades to come.

Executing on Growth

When I think of our overall growth plans, I think about them in two categories. The growth in TransAlta Renewables and the growth represented by the coal-to-gas conversions in TransAlta.

Supporting Growth in TransAlta Renewables

In 2018, we entered into agreements providing for the development and construction of two new wind facilities: i) a 90 MW project located in Pennsylvania, US with a 15-year purchase agreement with Microsoft; and ii) a 29 MW project located in New Hampshire, US with two 20-year purchase agreements with investment grade counterparties. In addition, we entered into a 20-year agreement with the Alberta Electric System Operator (AESO) for the 207 MW Windrise wind project in Alberta, Canada. We expect this growth to create approximately \$40 to \$45 million of new EBITDA in the consolidated company, with an average contract tenure of more than 18 years.

TransAlta Renewables acquired the economic interest in the Pennsylvania and New Hampshire wind projects. TransAlta Renewables is fully responsible for the capital costs associated with their construction. Further, the Windrise project is a drop down candidate for TransAlta Renewables. Growth projects that are dropped down to TransAlta Renewables are not funded from capital out of TransAlta. TransAlta Renewables has its own credit line, has the ability to raise project debt or tax equity on a project-by-project basis and also has its own source of free cash flow to fund these projects. TransAlta's 61% ownership of TransAlta Renewables also has the effect of lowering the cost of capital at TransAlta.

Coal-to-Gas Conversions: Growing TransAlta

The coal-to-gas conversions, including the pipeline, are very much growth-oriented as they will result in the cumulative life extension of our fleet by approximately 75 years, assuming all units are converted. The conversions will provide competitive, reliable, low cost power to the Alberta market and are expected to position us well in the anticipated Alberta capacity market. In 2018, we exercised our option to acquire 50 percent ownership in the Pioneer Pipeline, which will allow us to increase the amount of natural gas we co-fire at Sundance and Keephills and also facilitates the acceleration of the coal-to-gas conversions. The capital that we have committed to the Pioneer Pipeline is a significant milestone as it represents our first official capital investment in our coal-to-gas conversion strategy. The expected return on the coal-to-gas conversions far exceeds our cost of capital and makes it a clear winner for value creation. At the beginning of 2019, we received regulatory approval for our coal-to-gas conversions.

2019 and Beyond

As we look forward, we expect to see the cash flow from the Alberta hydro assets to naturally grow once its PPA expires. This is due to the fact we will fully benefit from the value tied to the capacity, energy and ancillary services associated with these long-term assets. Our Alberta hydro assets are essential to the Alberta market as they provide significant benefits in their unique ability to both provide reserves and respond quickly to changes in electricity demand. Our reinvestment in these hydro assets is unwavering as it provides shareholders with an interest in a set of assets that are scarce (in Alberta) and provide service into perpetuity.

Regardless of the political environment in Alberta that may emerge, we are positioned to respond effectively. The two policies in particular that warrant attention are: i) policies pertaining to market design, and ii) policies pertaining to greenhouse gases. The AESO has announced an intention to implement a capacity market in Alberta to be effective in 2021. We support the implementation of the capacity market because it provides for an effective replacement of the current capacity commitment under the legislated power purchase arrangements. A capacity market is an efficient way to ensure capacity is available in Alberta when consumers need power, regardless of whether the wind blows or the weather is cold. We also know that even more stable capacity is needed as the development of renewables increase over time, due to the intermittent nature of the renewable generation. We

also expect that as renewable generation continues to get cheaper and more desirable by customers, there can be a shortfall of capacity if the price isn't transparent and there isn't a concerted effort to call for enough new capacity. We also see an unrelenting demand by the public to reduce greenhouse gases in the production of electricity. We expect that large emitters will always pay something for their emissions.

This annual report marks our 7th year of reporting our own sustainability goals. I personally helped develop our sustainability goals in 1989 and bought our first carbon offsets in 1991. TransAlta has always been ahead of the market on how sustainability - both environmental sustainability AND economic sustainability - sets the context for how we do our work. By 2030, we will have reduced greenhouse gases by 60%, reduced SO₂ by 95% and reduced NO_x by 50% compared to 2015 levels. Our sustainability goals now touch on every aspect of our strategy, whether it's the coal-to-gas conversions, continuing to support our hydro assets in Alberta or growing TransAlta Renewables.

Owning TransAlta

One of the darkest days in my life as a CEO was January 18, 2016. On that day, the stock traded at \$3.76. This was the result of a number of factors, not least of which was the Government of Alberta's stated intention to cease coal-fired emissions by 2030. TransAlta responded quickly and decisively to that reality. We initiated and engaged in negotiations with the Government of Alberta, which ultimately resulted in the recovery of approximately \$37 million in annual Off-Coal payments. We also reduced our corporate recourse debt from \$3.4 billion to \$1.6 billion since 2015. Our success in stepping up to this challenge is reflected in our share performance since January 2, 2016, as compared to our peers on the TSX and the TSX utility capped index. Our return since that day has been approximately 35% annualized, including the dividend. This return has been achieved even though we are only half-way through our transformation.

This is not to suggest that you need to wait until 2022 to realize value. We know that shareholders expect more and expect more sooner. As detailed above, the company remains focused on i) the conversions to gas (including their ability to compete in the capacity market), ii) pursuing incremental growth at TransAlta Renewables; and iii) competitively positioning the Alberta hydro assets in Alberta. These priorities, taken together, are expected to generate sufficient free cash flow in order to allow us to allocate capital to new growth projects, pay shareholder dividends, complete share buy-backs or fund additional debt reduction. By remaining focused and dedicated to this strategy, we are confident in our ability to create sustainable shareholder value.

As always, we appreciate your input as we move through this transition. I will leave with you one final thought. As we go beyond 2020, we are focused on implementing our capital allocation strategy that balances the demand associated with reinvestment, growth, debt repayments and, not least of which, providing shareholders a return on their capital.



Dawn L. Farrell
President and Chief Executive Officer

February 26, 2019

Message from the Chair

Dear Fellow Shareholders,

2018 marked a strong year of financial and operating performance for TransAlta. Our improving performance is just one indicator of progress. The bigger indicator that TransAlta is on the right track, is the enhanced clarity and confidence we have related to our future of clean power generation and our ability to unlock and create value from our diverse portfolio of assets.

Resilience, Strength and Focus

TransAlta has come a long way from the regulatory uncertainty and balance sheet complexity of just four years ago. The extent of our transformation speaks to the resilience of our business, strength of our team and relentless focus on execution. While these are significant accomplishments, our job as your Board is to keep looking ahead, and to ensure the actions we are taking today will continue the momentum towards future success.

In 2018, TransAlta maintained focus on this future by accelerating debt repayment, advancing the transition from coal to gas, while making strategic investments to drive incremental growth and future cash flows. With one of the strongest balance sheets in the sector, TransAlta invested in its clean power future by acquiring wind farm developments with long-term contracted revenue streams and made a critical investment in the gas pipeline for the conversion of our coal plants to gas. We also bought back shares under our share buy-back program, something we will continue to act on when the right opportunity arises. These steps along with continued work on the new market design and confidence in the long-term value of existing hydro and wind assets provide a firm foundation for delivery of shareholder value.

Furthermore, to ensure we have the talent and expertise to lead TransAlta into the future, we added talent to our executive team in 2018 with the addition of Christophe Dehout as Chief Financial Officer, Kerry O'Reilly as Chief Legal Officer, and Jane Fedoretz, as Chief Talent & Transformation Officer. All three executives bring enthusiasm, experience and intellect to support the company's evolution to a leaner, more efficient, more profitable customer-focused culture.

We continue to bring fresh insight and broad experience to our Board which offers diversity of experience, tenure and perspective. Over the past eighteen months, we have been able to attract two very talented Directors in the Honourable Rona H. Ambrose and Bryan D. Pinney. Our Directors, with an average tenure of six years, bring expertise in all aspects of TransAlta's business and their insight and judgement have guided the development and advancement of the long-term strategy.

We have also strategically timed retirements to ensure continuity and stability on the Board. Our long-standing director Timothy Faithfull will retire following our 2019 Annual Shareholder Meeting. On behalf of the Board, I would like to thank Tim for the wealth of knowledge and expertise he has brought to the board during his tenure. For my part, I expect to retire as a director and Chair next year and the Board will be working to identify a new chair through the course of 2019.

As I complete my tenure as Chair, the Board's priority will be to oversee the final stages of TransAlta's transformation plan. We continue to be like the tortoise I referred to last year - consistently moving forward to deliver on our stated goals. The finish line is in sight. With our expert team and diverse portfolio of assets, TransAlta is in a strong position to respond to future clean energy demands and create long-term value for shareholders.



Ambassador Gordon D. Giffin
Chair of the Board of Directors
February 26, 2019