



**ArborGen**  
— HOLDINGS —

Annual Review 2021



## Chairman and CEO's Letter

Dear Shareholder

This Review outlines ArborGen Holdings Limited's performance for the twelve-month period to 31 March 2021 and our assessment of the Company's near-term growth trajectory. All dollar values are in US currency unless otherwise stated.

The fiscal year ending March 2021 (FY2021) proved to be one of the most challenging periods we have experienced, as the global Covid pandemic materially affected sales in two of the three regions in which we operate – the United States and Brazil. While in Brazil the impact was expected through most of the year, in the US it was not until lifting season when the extent of the impact of Covid on seedling demand (which affected the entire seedling market) became apparent. Given these unprecedented conditions, we are extremely pleased to be able to report solid year-over-year performance, with significant improvements in net earnings, operating cash flow and US GAAP EBITDA<sup>1</sup>, and a reduction in net debt.

Looking ahead, strong underlying demand for solid wood products in the US over the next decade due to years of underbuilding, demographic changes, an ageing housing stock, and structural supply constraints in Canada, the Western United States and Europe is driving an expansion in sawmill capacity in the US South. This growth in timber demand will in turn support increasing demand for softwood seedlings over the next decade. These market dynamics create a strong tailwind for the execution of our strategy to drive the market to advanced genetics and we are expecting that a significant increase in Mass Control Pollinated (MCP) seedling production and sales will drive strong growth in our earnings and cash flow over the next few years.

### Highlights

- Profit growth in FY2021 in line with expectations despite Covid impact
- Material improvement in net earnings to \$3.2m (\$2.7m loss in FY20)
- Strong operating cash flow of \$9.9m, up 106%
- Reduction in net debt to \$27.4m, down \$2.2m
- Doubling of US-GAAP EBITDA<sup>1</sup> to \$11.3m, up 109%
- Well positioned for FY22 with 30% increase in MCP seed harvested
- Further growth of MCP expected in future years from maturity of orchards and flowers pollinated in FY21
- Strong housing growth and carbon credits provide significant growth opportunities
- Added opportunity to extend proprietary intellectual property into other crop species
- US-GAAP EBITDA guidance for FY22 of \$13 - \$14.5 million – a material increase on FY21 which included government grant income.

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<sup>1</sup> US-GAAP EBITDA is US-GAAP Earnings Before Interest, Tax, Depreciation and Amortisation. ArborGen uses US-GAAP EBITDA when discussing financial performance. This is a non-GAAP financial measure and is not recognised within IFRS. Non-GAAP financial measures should not be viewed in isolation nor considered as a substitute for measures reported in accordance with GAAP. Management believes that US-GAAP EBITDA provides useful information, as it is used internally to evaluate performance, and it is also a measure that equity analysts focus on for comparative company performance purposes, as the measure removes distortions caused by differences in asset age, depreciation policies and debt:equity structures. A reconciliation is provided in note 30 of the financial statements.

## Financial Performance

12 months ended 31 March

US \$m	FY21	FY20	% change
Revenue	52.7	56.9	-7%
Operating Earnings (before other significant items) <sup>2</sup>	2.6	2.4	8%
Net Earnings	3.2	(2.7)	N/A
Net Cash from Operating Activities	9.9	4.8	106%
US GAAP EBITDA <sup>1</sup>	11.3	5.4	109%
Net Debt	27.4	29.6	-7%

During the twelve-month period, the Group reported:

- Revenue of \$52.7 million, comprising sales of \$36.8 million in the US, \$9.9 million in New Zealand and Australia, and \$6.0 million in Brazil. This is down from the \$56.9 million reported in the prior period and is almost entirely due to sales reductions in the United States and Brazil.
- Operating earnings (before other significant items) of \$2.6 million, up \$0.2 million on the \$2.4 million recorded in the prior period.
- Significant improvement in net earnings of \$3.2 million<sup>3</sup> up from a loss of \$2.7 million recorded in the prior period. During the period, ArborGen received \$4.3 million from the US Small Business Administration (SBA) under the Paycheck Protection Program (PPP) of which \$3.4 million was recognised as other income in the twelve-month result. The prior period net loss of \$2.7 million included \$3.9 million of charges, including \$1 million of seedling credits provided to customers to address prior period seedling survival claims, and \$2.3 million of seed cost adjustments.
- US-GAAP EBITDA of \$11.3 million (excluding public company / corporate costs of \$1.3 million) – a material improvement on the prior period's \$5.4 million.
- Net cash from operating activities of \$9.9 million, a doubling of the \$4.8 million in the prior period (including Covid grants).
- Net debt (excluding \$5.9 million of capitalised leases and deferred grant income) of \$27.4 million, down from \$29.6 million in the prior comparable period. Net debt would have been even lower but for the late lifting season brought about by restrictions on migrant labour into the US from Central America, which resulted in accounts receivable being approximately \$2 million higher than would otherwise have been the case at year end. Such receivables were collected in April. The main use of cash during the period was a \$2.5 million spend on building the supply of higher value MCP seed inventory in the US as MCP bagging and pollination activity increased by over 30% compared to the prior period.

<sup>2</sup> Includes other significant items of \$2.0 million comprising government grant subsidies of \$3.7 million, partially offset by expenses in the period of \$1.7 million relating to seedlings written-off and incremental Covid expenses incurred in the period (2020: a loss of \$3.9 million).

<sup>3</sup> Net earnings include a biological asset loss of \$0.1 million (\$0.6 million loss in the prior period) which relates to a share of earnings on seedling crop still in the ground, as required under IFRS.

## Seedling Sales Performance

Turning to seedling sales performance in the 12 month period to 31 March 2021, ArborGen sold 391 million seedlings globally – 294 million seedlings in the US (including 263 million loblolly pine seedlings of which 31% were MCP and varietal seedlings), 32 million seedlings in Australasia, and 65 million seedlings in Brazil.

	Seedling Sales FY21 (m)	Seedling Sales FY20 (m)
<b>USA</b>	294	333
<i>USA Loblolly MCP%</i>	31%	30%
<b>Brazil</b>	65	65
<b>New Zealand/Australia</b>	32	39
<b>Total</b>	391	437

In the US, unit seedling sales decreased by just over 10% to 294 million units in the period, from 333 million seedling units in the prior period. This sales reduction year-over-year is largely explained by the global pandemic which affected ArborGen in two key ways:

- Sawmill closures in the early part of calendar year 2020 resulted in delayed log harvesting and, in turn, critical site preparation activities, both key prerequisites for seedling planting (customers typically clear and prepare land for planting from March through to October with planting starting in November); and
- Temporary suspension of non-immigrant worker H2-B visas into the US combined with planting crews contracting Covid, led to planting labour shortages during the critical planting season.

Added to this, a number of hurricanes during the period (particularly Hurricane Laura) affected site preparation progress in certain regions.

Our New Zealand and Australian operations had a solid year despite seedling sales decreasing year-over-year to 32 million from 39 million – driven entirely by a reduction in NZ of lower margin sales of Open Pollinated (OP) seedlings that supported the NZ Government's one billion trees programme in the prior year.

In Brazil, sales of 65 million seedlings were flat on prior year as this region was hit the hardest by the pandemic in 2020, followed by an extended drought season. That said, gross margin improved significantly year-over-year due to reduced reliance on third party nursery production capacity following the integration of two leased nurseries into our operations.

## Key Growth and Strategic Initiatives

With the core building blocks of the business now in place, we continue to progress the strategic, operational, and financial goals we have set for the business:

- Expanding our supply of proprietary advanced genetics, and growing sales of advanced products;
- Mitigating the risk of adverse climatic events;
- Improving cash flow generation; and
- Expanding our footprint in a capital-light manner in our core growth regions.

## **MCP Growth Strategy**

The most fundamental strategy for growing our earnings and cash flow is premised on growing supply and sales of our proprietary advanced seedling genetics (MCP) supply and sales in our largest market – the US. Specifically, this involves:

- Developing an extensive portfolio of best-in-class proprietary MCP products through continued investment in research and development;
- Expanding the supply of our proprietary genetics through the establishment of orchards across the US South; and
- Accelerating our Acquire, Build Confidence, Convert and Defend (ABCD) sales and marketing strategy – actively acquiring new customers, but importantly, converting or upgrading our customers from lower margin, lower genetic OP seedling to higher value MCP seedlings.

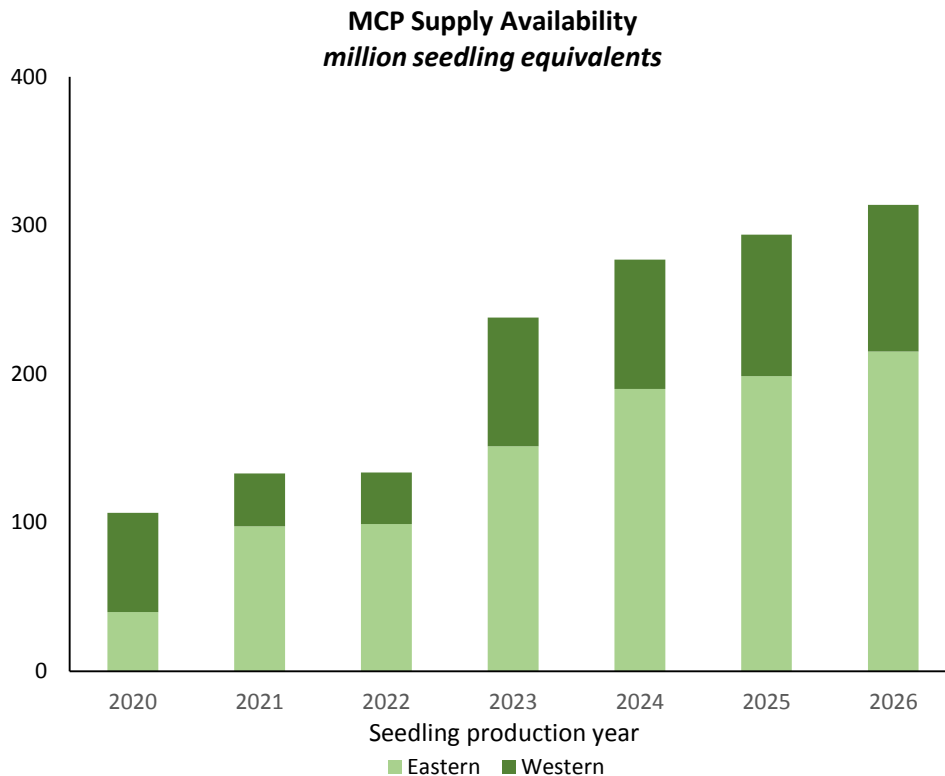
This, in turn, will drive substantial increases in plantation forest productivity and yields, strong financial returns for our customers and also material increases in ArborGen's margins, earnings and cash flow. Proven MCP performance at commercial scale, increased market awareness of the value of MCP products, combined with increasing supply of MCP seed means we are now positioned to realise the gains from over two decades of investment.

## **Expanding Supply of our MCP Seedlings in the United States**

ArborGen has invested significantly in developing its best-in-class proprietary genetics, deploying those genetics in our seed orchards, and increasing our MCP bagging and pollination activity to increase seed supply in future periods.

As the next chart shows, this historic activity is now bearing fruit, with the availability of our proprietary MCP seedlings in the US showing a marked increase in future supply, particularly in our highest demand US Coastal South and Piedmont markets, as our extensive younger seed orchards have started to flower and produce seed.





*Note: MCP supply projections are based on a number of factors including the number of trees in our seed orchards, number of flowers bagged and number of flowers pollinated each year which are subject to climatic variabilities), as well as bushels of cones harvested, pounds of seed extracted per bushel, and the number of seedlings per pound of seed. As such, actuals may vary from projections due to biological factors outside of our control, as well as operational decisions.*

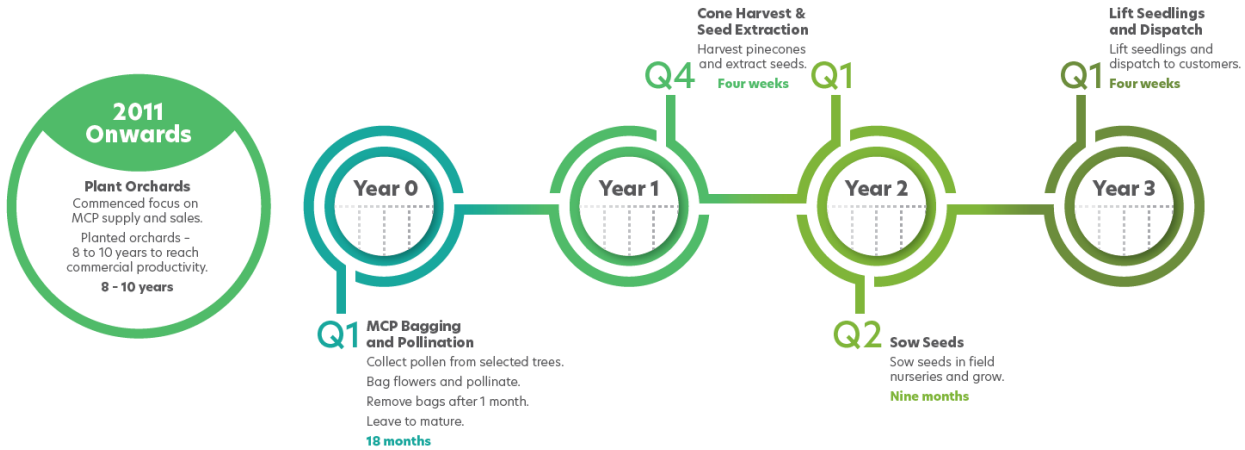
We are very pleased to report that after three years of constrained MCP supply due to a number of unusual biological outcomes (including a lower than normal flower count due to extreme frost in 2017) and abnormal weather events including Hurricane Michael 2018, some of our younger orchards have now entered their productive life. Last year’s cone harvest (completed in late 2020) generated a material increase in MCP seed production, particularly in our severely constrained Eastern (Coastal and Piedmont) regions. This is seed that is available for seedling sales in the current fiscal year ending March 2022, which has allowed us to substantially increase MCP seedling production this year by over 30%, or approximately 30 million seedlings.

The margin growth potential for ArborGen is substantial as MCP margins are 6-8 times higher than OP margins on an absolute basis.

We have also recently completed our 2021 MCP bagging and pollination activity which saw an unprecedented number of flowers, resulting in a 35% increase in bagging over the prior year. Nearly every orchard surpassed its projected bagging target. In addition, we successfully carried out a night-time MCP pollination trial at our Livingston seed orchard in Texas, which, if successful, is anticipated to enhance seed production in future periods by allowing us maximise the time available for pollination during years when the pollination “window” is short due to problematic weather conditions. We also produced, for the first time, a quantity of Texas and Coastal MCP crosses (pollen from Coastal “fathers” crossed with Texas “mothers” to produce seed) to help us further boost Coastal MCP supply that can be used in certain areas (discussed further below in the Risk Mitigation section).

Subject to uncontrollable factors, such as hurricanes, the increase in the recently completed 2021 MCP pollination activity will drive a significant boost in MCP seedling supply for the fiscal year ending March 2024. This time lag is explained in the chart below – that is, there are three years from pollination activity to ultimate seedlings sales.

### Production Timeline



### Increasing the Proportion of Superior, Further-Advanced Products in our US Advanced Genetics Portfolio

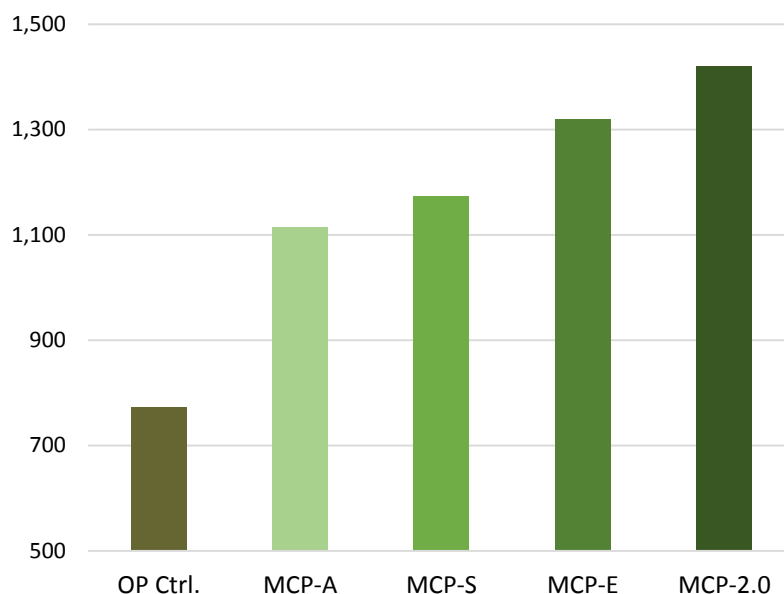
As explained in our Interim Review, in addition to growing MCP seed supply, we are also focused on advancing our pipeline of next generation advanced products to ensure we continuously move our customers up the MCP value chain – offering them superior products to increase value and maintaining our strong competitive lead in the market. In this respect, we focus our product development efforts each year on ensuring the MCP families we offer our customers are the best available in the market.

We have invested significantly in building the supply pipeline of these products, and we project that the availability of the higher-value MCP products such as MCP-Elite and MCP-2.0 where we have a very strong competitive advantage, will increase substantially over the next five years.

The chart below is a simple illustration of the substantial value created by our top MCP products and varietal products relative to OP products.

## Substantial Value Created for Our Customers

Bare Land Value \$ per acre



*Indicative only – ultimate value accretion is dependent on site location and silviculture regime adopted, amongst a range of other factors. Bare land value, or BLV, is a specialised Discounted Cash Flow technique used for timberland investments that calculates the value of bare land in timber production.*

ArborGen is also the only global developer and supplier of loblolly varietal products which represent the pinnacle of genetics value. Beyond the value they create as products themselves, varietals are used as parents to produce our best-in-class, proprietary OP and MCP products – which no competitor can match.

ArborGen is the clear MCP market leader, responsible for over 85% of all MCP sales in the addressable market over the past five years, and is the only company with a portfolio of MCP products addressing the entire US loblolly market and the only provider of MCP 2.0 products to the market. Our MCP pipeline continues to improve as we integrate new, better MCP parents into our orchards.

### Mitigating the Risk of Adverse Climatic Events

Given the nature of our business, we are clearly subject to climatic events that could adversely impact both our seed and seedling production, and hence we have a number of initiatives and standard operating procedures (SOPs) to minimise and mitigate the risks of these events.

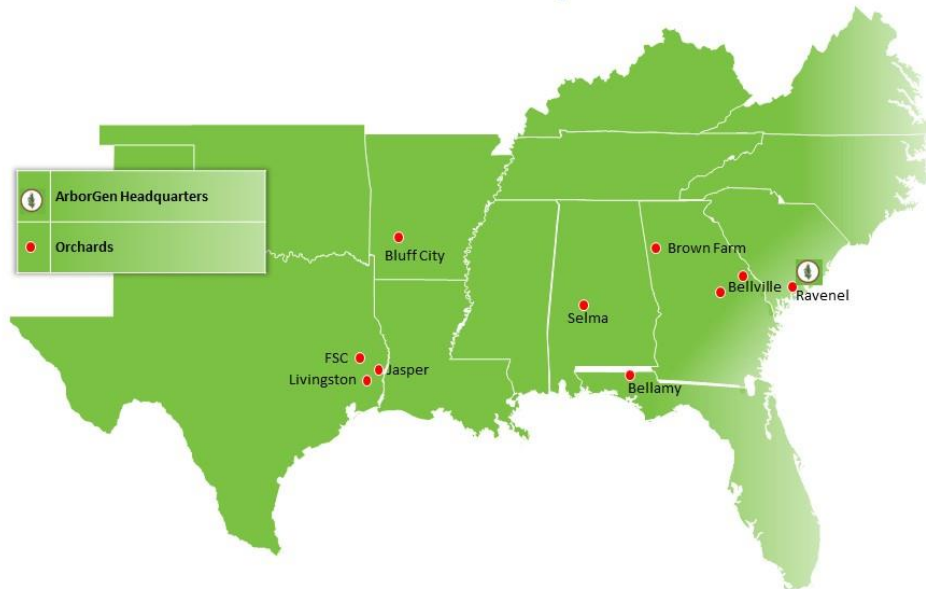
With respect to seed production, the most important risk mitigation strategy is to build sufficient inventory of reserve seed so that we are not completely reliant on seed harvested each year. While we have several years of OP seed inventory on hand, MCP seed supplies in some provenances are limited due to the eight to ten year interval between planting orchards and the first seed harvest, and the severe weather events in 2018 which devastated our largest orchard complex. These supply issues, combined with strong and growing demand for MCP, which requires most of our annual seed harvest to be used in annual seedling production have prevented us from reaching our inventory buffer targets. We are actively working on building our buffer MCP seed inventory to combat the risks of adverse weather events and biological factors. In this respect, the projected growth in our MCP seed supply (shown on the chart on page 5) should allow us to reach our minimum two-years on hand of seed inventory in the next three to four years (we have already begun building inventory in Texas and Arkansas).



Beyond building seed inventory, our orchard investments have allowed us to further reduce MCP seed supply risk:

- We have ten geographically dispersed orchards in South Carolina, Georgia, Florida, Alabama, Texas and Arkansas.

## ArborGen Orchard Operations



- Investments in orchard capacity made eight to ten years ago are now bearing fruit as the large number of younger trees in our orchards aged between seven and twelve years (representing about 60% of our total orchard trees) are now becoming highly productive, and we continue to plant new trees with improved genetics as older trees are taken out of production.

With respect to seedling production, seedlings are most vulnerable to mortality in the first four to six weeks of growth post sowing of seed from extreme weather events (wind storms, hail storms and flooding). To mitigate losses due to extreme weather, ArborGen has an array of nursery procedures which we are continuously improving including:

- The use of crop covers and wind fences to protect against wind damage;
- Modifying field topography to maximise drainage and minimise flooding; and
- The use of field glues to minimise seed washing away due to heavy rains immediately after planting.

In addition to standard nursery SOPs, we plant more seedlings than we expect to sell during the initial sowing period in the event of seedling losses. Last year we also established the option of sowing an additional crop up to a month after initial sowing through staging of additional buffer seed at our nurseries.

## Operational Cash Flow Initiatives

We constantly strive to increase the cash generation performance of our business. While the single largest driver of cash flow improvement comes from converting our customers to higher value genetics, we continue to implement a range of initiatives designed to supplement that core objective. Over the last year, these have included:

- The consolidation of certain nursery and orchard roles resulting in annual savings of \$0.2 million;
- The elimination of certain R&D roles and work streams reducing R&D spend by approximately \$1 million on an annualised basis (about half of the savings will materialise in the current (FY2022) year);
- An increase in collaboration income and lease income (from leasing part of our greenhouse facilities) targeted for the current year;
- Improved utilisation of equipment across our nurseries;
- Reductions in discretionary overhead costs and capital expenditure in all the regions in which we operate; and
- Accessing government funding programmes, where we qualify, to mitigate Covid related disruptions.

## Improved Funding Arrangements

As reported in our Interim Review, in November 2020, we successfully renegotiated and extended our revolving credit facility agreement with Synovus Financial Corporation (Synovus) relating to our \$17 million letter of credit (LOC) facility in the US, to 31 August 2023 from 31 August 2021. As part of the amendment to the agreement, Synovus also agreed to:

- Increase the annual 60-day (continuous) pay down maximum borrowing limit to \$10 million, up from \$7.5 million previously; and
- Release the final \$2 million of restricted cash Synovus previously required as collateral.

The interest rate applicable to the LOC is the 30-day London Inter-bank Offered Rate (LIBOR) base rate plus 2.75% with a minimum annual rate of 3.5%.

The renegotiated agreement provides us with \$4.5 million of additional working capital 'cushion', and is a recognition of strengthened performance and the inherent significant seasonality of the business.

## Immediate Outlook

Turning to the current FY2022 fiscal year, increased availability of our proprietary MCP seedlings in the US, improving markets in all regions, and higher demand for our proprietary genetics in the US and Brazil, create strong tailwinds for fiscal 2022. In light of this, and **subject to any uncontrollable factors, we are targeting US-GAAP EBITDA<sup>4</sup> for the current year ending March 2022 to be in the \$13 - \$14.5 million range and further reduction in net debt from internal cash generation across the period.** This target represents significant growth on FY21 which included Covid related government grant income.

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<sup>4</sup> Excluding public company / corporate costs of approximately \$1 million

## **United States**

With 50% of adults now fully vaccinated and the expectation that 75%-85% will be vaccinated by August of this year, our operational and sales activities in our largest market will continue to return to normalcy. Consistent with the US Centre for Disease Control recommendations, we are gradually returning to normal operations at our production facilities, increasing our face-to-face customer interactions and participation in industry meetings as they begin to restart. This bodes well for ArborGen's upcoming sales season which commences in December 2021. The regulations around H2-B non-immigrant labour visas have also eased, reducing the risk that this will be a barrier to planting in FY2022.

Moreover, strong underlying demand for solid wood products (particularly softwood products) in the US is driving an expansion in sawmill capacity in the US South, which in turn will support strong demand for softwood seedlings in the current period and beyond.

With approximately 180 million units of our total US loblolly sales of 263 million seedling units last year comprising OP seedlings (approximately 70% of total sales), we are very focused on increasing MCP production and converting existing customers from OP genetics to MCP genetics to create substantial value for customer estates, and to drive earnings growth. In this respect, and as noted earlier, this year we have sown the highest volume of MCP seed in our history (up 30% or 30 million units on last year) for sale in the current fiscal year ending March 2022.

From a demand standpoint, our larger industrial customers now fully understand the increased value our advanced genetics offer them in terms of the economic returns delivered to their forest estates and have stated objectives ranging from 50% to 90% of their estates being planted with MCP genetics over time. As previously indicated, we are now focused on extending our conversion activities into the large private landowner segment) which comprises more than 50% of the total US seedling market and approximately 60% of our customer base in seedling unit terms.

Outside of forestry, our somatic embryo capabilities, genomics and tissue culture expertise create a number of opportunities for us in other crop species. We have already deployed our technology in sugar cane, developed tissue culture protocols for cannabis and are evaluating other opportunities including coffee and cocoa production. We are also evaluating opportunities to license elements of our technology platform in areas that are not competitive with us.

## **Australia / New Zealand**

The underlying demand drivers for forestry in NZ and Australia remain strong. In NZ, demand is driven by a combination of "wall of wood" age class re-planting of existing forests established in the late 1980s to mid-1990s planting boom, as well as new forest establishment driven by government policies to meet climate commitments, regional development goals, land use change, and increased planting of native species.

We also continue to be focused on growing our NZ horticulture business propagating high-value horticultural species, leveraging our expertise in tissue culture and nursery production to rapidly produce elite germplasm plant material for growers. Currently, we are working on a wide variety of crops including hops, blueberries, rubus and tea.



## Brazil

While sales have to date been materially affected by the impact of Covid in the region, we are optimistic that we will see a substantial increase in sales in the current year as evidenced by the fact that orders to date are nearly 70% higher than they were at this time last year. We believe that increasing softwood product exports, new pulp mills (recently announced), strong demand for eucalyptus based pulp and charcoal products, expansion of our sales and marketing efforts and increasing recognition of the value of our proprietary products will all contribute to these projected sales increases.

We continue to benefit from increased in-house production capacity and lower production costs (and hence improved gross margins) following the lease of two full-scale nurseries:

- A 15 million eucalyptus nursery in Minas Gerais (the largest charcoal producing state in Brazil) from Brotale in late 2019; and
- A 15 million eucalyptus nursery in Mato Grosso do Sul in April 2020.

In respect of our superior genetics offering, in October 2020 we announced that ArborGen had entered into an agreement with Vallourec (one of the leading suppliers of steel in South America, and specialty steel globally) which gives us exclusive rights to develop and commercialise Vallourec's genetically improved eucalyptus clones in Brazil. The partnership will expand the products ArborGen can offer our customers, as well as allow us to expand into new markets in Brazil. We also have exclusive rights to commercialise International Paper's and Gerdau's eucalyptus clones in Brazil, and continue to develop our own proprietary eucalyptus clones which we have begun selling in small quantities, with full-scale commercialisation expected by 2024.

We would like to thank all of our stakeholders for their continued support – it is very much appreciated. As noted at the outset, we are putting considerable effort into the operational performance and cash generation of this business. We are committed to delivering increasing value for our shareholders.



Dave Knott Jr  
Chairman



Andrew Baum  
CEO

27 May 2021