## REVIEW OF Q2 2019 FINANCIAL RESULTS

August 9, 2019

## Cascades



DISCLAIMER
FORWARD-LOOKING STATEMENT
Certain statements in this presentation, including statements regarding future results and performance, are forward-looking statements within the meaning of securities legislation based on current expectations. The accuracy of such statements is subject to a number of risks, uncertainties and assumptions that may cause actual results to differ materially from those projected, including, but not limited to, the effect of general economic conditions, decreases in demand for Cascades Inc.'s ("Cascades," "CAS," the "Company," the "Corporation," "us" or "we") products, the prices and availability of raw materials, changes in the relative values of certain currencies, fluctuations in selling prices and adverse changes in general market and industry conditions. This presentation may also include price indices as well as variance and sensitivity analyses that are intended to provide the reader with a better understanding of the trends related to our business activities. These items are based on the best estimates available to the Corporation.
SUPPLEMENTAL INFORMATION ON NON-IFRS MEASURES - SPECIFIC ITEMS
The Corporation incurs some specific items that adversely or positively affected its operating results. We believe it is useful for readers to be aware of these items, as they provide additional information to measure the performance, compare the Corporation's results between periods and to assess operating results and liquidity, notwithstanding these specific items. Management believes these specific items are not necessarily reflective of the Corporation underlying business operations in measuring and comparing its performance and analyzing future trends. Our definition of specific items may differ from those of other corporations and some of them may arise in the future and may reduce the cash available to us.
They include, but are not limited to, charges for (reversals of) impairment of assets, restructuring gains or costs, loss on refinancing and repurchase of long-term debt, some deferred tax assets provisions or reversals, premiums paid on long-term debt refinancing, gains or losses on the acquisition or sale of a business unit, gains or losses on the share of results of associates and joint ventures, unrealized gains or losses on derivative financial instruments that do not qualify for hedge accounting, unrealized gains or losses on interest rate swaps, foreign exchange gains or losses on long-term debt, specific items of discontinued operations and other significant items of an unusual, non-cash or non-recurring nature.

RECONCILIATION OF NON-IFRS MEASURES
To provide more information for evaluating the Corporation's performance, the financial information included in this analysis contains certain data that are not performance measures under IFRS ("non-IFRS measures") which are also calculated on an adjusted basis to exclude specific items. We believe that providing certain key performance measures and non-IFRS measures is useful to both management and investors as they provide additional information to measure the performance and financial position of the Corporation. It also increases the transparency and clarity of the financial information. The following non-IFRS measures are used in our financial disclosures:

- Operating income before depreciation and amortization (OIBD): Used to assess operating performance and contribution of each segment when excluding depreciation \& amortization. OIBD is widely used by investors as a measure of a corporation ability to incur and service debt and as an evaluation metric.
- Adjusted OIBD: Used to assess operating performance and contribution of each segment on a comparable basis.
- Adjusted operating income: Used to assess operating performance of each segment on a comparable basis.
- Adjusted net earnings: Used to assess the Corporation's consolidated financial performance on a comparable basis.
- Adjusted free cash flow: Used to assess the Corporation's capacity to generate cash flows to meet financial obligation and/or discretionary items such as share repurchase, dividend increase and strategic investments.
- Net debt to adjusted OIBD ratio: Used to measure the Corporation's credit performance and evaluate the financial leverage.
- Net debt to adjusted OIBD ratio on a pro forma basis: Used to measure the Corporation's credit performance and evaluate the financial leverage on a comparable basis including significant business acquisitions and excluding significant business disposals, if any.

Non-IFRS measures are mainly derived from the consolidated financial statements but do not have meanings prescribed by IFRS. These measures have limitations as an analytical tool, and should not be considered on their own or as a substitute for an analysis of our results as reported under IFRS. In addition, our definitions of non-IFRS measures may differ from those of other corporations. Any such modification or reformulation may be significant.

All amounts in this presentation are in Canadian dollars unless otherwise indicated.

## SUMMARY OF QUARTERLY FINANCIAL RESULTS



Record quarterly sales and adjusted OIBD generated in Q2 2019

[^0]
## HISTORICAL SEGMENTED QUARTERLY OPERATING INCOME (LOSS) \& ADJUSTED OIBD1

Containerboard (millions of CAN\$)


Specialty Products ${ }^{2}$ (mililions of CANS)


- Operating Income

Boxboard Europe (millions of CAN\$)


- Operating Income
- Adjusted OIBD ${ }^{1}$


## Tissue Papers (millions of CANs)



- Operating Income (Loss)
- Adjusted OIBD ${ }^{1}$


## HISTORICAL SEGMENTED QUARTERLY SHIPMENTS

Containerboard ('000 s.t. and \% capacity utilization')


Boxboard Europe ('000 s.t. and \% capacity utilization')


Tissue Papers ('000 s.t. and \% capacity utilization')


## RAW MATERIAL COSTS - INDEX LIST PRICES



Current (July-19)

## SEGMENTED REVIEW



PACKAGING PRODUCTS / CONTAINERBOARD

\left.| Results | Change vs. |  |
| :---: | :---: | :---: |
| Q2 2019 | Q1 2019 | Q2 2018 |
| Shipments ('000 s.t.) |  |  |$\right)$

Comments on sequential performance
$\rightarrow$ Shipments increased sequentially. This reflects a $5 \%$ increase in containerboard shipments that is attributable to favourable seasonal variations and a $3 \%$ increase in capacity utilization. Converted products shipments also increased $7 \%$ on a sequential basis.
$\rightarrow$ The average selling price decreased by $1 \%$ in Canadian dollars as a result of the lower index selling price, primarily in the manufacturing segment. This more than offset the beneficial impact of the $1 \%$ depreciation of the Canadian dollar compared to the US dollar.
$\rightarrow$ The sequential increase in sales is largely due to the higher volumes, the effects of which more than counterbalanced the impact of the lower average selling price in the period.
$\rightarrow$ The $9 \%$ sequential increase in adjusted OIBD reflects the higher sales levels and lower raw material pricing (OCC) in the period. These were partially offset by the lower average selling price and higher operating costs during the period, most notably labour, warehousing, maintenance and repair.

Scheduled maintenance and capital investment downtime (in s.t.)

| Q1 2019 | Q2 2019 | Q3 2019 | Q4 2019 | FY 2019 |
| :---: | :---: | :---: | :---: | :---: |
| 8,500 | $\sim 9,000$ | $11,000-12,000$ | $12,000-13,000$ | $40,500-42,500$ |
| Market related downtime (in s.t.) |  |  |  |  |
| Q1 2019 | Q2 2019 |  |  |  |
| - | $\sim 12,000$ |  |  |  |

## $\square$ PAPERS

## TISSUE PAPERS

| $\begin{array}{c}\text { Results } \\ \text { Q2 2019 }\end{array}$ | Change vs. |  |
| :---: | :---: | :---: |
| Q1 2019 | Q2 2018 |  |
| Shipments ('000 s.t.) |  |  |$)$

## Comments on sequential performance

$\rightarrow$ Shipments increased $6 \%$ sequentially. Converting shipments rose $9 \%$, driven by increases in all converted product Away-from-Home segments that reflect the usual favourable seasonal trends, as well as volume gains in the retail segment. Shipments of jumbo rolls decreased $3 \%$ sequentially, which is attributable to the higher integration rate and the previously announced closure of 2 plants in Toronto, Ontario.
$\rightarrow$ The slight increase in the average selling price reflects the depreciation of the Canadian dollar and the higher proportion of converted products in the sales mix.
$\rightarrow$ The $8 \%$ increase in sales sequentially is attributable to the positive impact of the higher volumes and average selling price, as discussed above.
$\rightarrow$ Adjusted OIBD increased by $\$ 9$ million on a sequential basis. This reflects the combined positive impact stemming from the higher average selling price, lower raw material prices, and improved operational performance of the primary mills in the current period. This segment also recorded $\$ 4$ million of prior year U.S. tax credits during the second quarter.

## PACKAGING PRODUCTS / BOXBOARD EUROPE

| Results | Change vs. |  |
| :---: | :---: | :---: |
| Q2 2019 | Q1 2019 | Q2 2018 |
| Shipments ('000 s.t.) |  |  |
| 331 | (1)\% | 20\% |
| Average selling price ${ }^{1}$ <br> (CAN\$/unit) |  |  |
| 783 | (2)\% | (7)\% |
| (Euroflunit) |  |  |
| 521 | (1)\% | (5)\% |
| Sales (M\$) |  |  |
| 270 | (3)\% | 16\% |
| Operating income (M\$) |  |  |
| 19 | 6\% | (14)\% |
| Adjusted OIBD ${ }^{1}$ (M\$) |  |  |
| 30 | 3\% | - |
| \% of sales <br> 11.1\% |  |  |

(1) Average selling price for manufacturing and converting activities only

## Comments on sequential performance

$\rightarrow$ Shipments of virgin boxboard were relatively stable compared to the prior period, while those of recycled boxboard decreased 2,000 s.t., or $1 \%$ sequentially.
$\rightarrow$ The lower average selling price reflects the $1 \%$ appreciation of the Canadian dollar compared to the euro, in addition to the $2 \%$ decrease in the average selling price of recycled boxboard, and comparable $1 \%$ decrease in virgin boxboard.
$\rightarrow$ The lower sequential sales is attributable to the lower average selling price, as discussed above, the slight decrease in volumes, and the appreciation of the Canadian dollar in the period.
$\rightarrow$ Adjusted OIBD increased sequentially as a result of lower energy and raw material costs, the benefits of which more than offset the lower average selling price in the period.

## PACKAGING PRODUCTS / SPECIALTY PRODUCTS

| Results Q2 2019 | Change vs. |  |
| :---: | :---: | :---: |
|  | Q1 2019 | Q2 2018 |
| Sales (MS) |  |  |
| 193 | (2)\% | 18\% |
| Operating income (MS) |  |  |
| 6 | 50\% | 100\% |
| Adjusted OIBD' ${ }^{\text {(MS }}$ ) |  |  |
| 13 | 8\% | 44\% |
| $\begin{aligned} & \text { \% of sales } \\ & 6.7 \% \end{aligned}$ |  |  |

## Comments on sequential performance

$\rightarrow$ The lower quarter-over-quarter sales is primarily explained by the impact of lower recycled fibre pricing on results from the Recovery operations. This was largely offset by higher shipments in the packaging activities, and a sequential pricing and sales mix improvement in the Industrial Packaging sub-segment that is mostly attributable to the closure of the plant that manufactured felt backing for vinyl flooring.
$\rightarrow$ The sequential improvement in adjusted OIBD is largely due to better realized spreads, and more favourable sales mix and volumes in packaging activities. These benefits were partially offset by lower realized margins in the Recovery operations and higher operating costs.

Specialty products segment adjusted OIBD is attributable to sub-segments as follows (in M\$):

|  | Q1-18 | Q2-18 | $\begin{array}{r} \text { Q2-18 } \\ \text { YTD } \\ \hline \end{array}$ | Q1-19 | Q2-19 | $\begin{array}{r} \text { Q2-19 } \\ \text { YTD } \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Packaging | 7 | 7 | 14 | 14 | 15 | 29 |
| Recovery \& Recycling | - | 2 | 2 | (2) | (2) | (4) |
| Total | 7 | 9 | 16 | 12 | 13 | 25 |

Specialty products segment sales are attributable to sub-segments as follows (in M\$):

|  | Q1-18 | Q2-18 | $\begin{array}{r} \text { Q2-18 } \\ \text { YTD } \end{array}$ | Q1-19 | Q2-19 | $\begin{array}{r} \text { Q2-19 } \\ \text { YTD } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Packaging | 85 | 87 | 172 | 129 | 135 | 264 |
| Recovery \& Recycling | 75 | 77 | 152 | 68 | 58 | 126 |
| Inter-segment eliminations | (1) | - | (1) | (1) | - | (1) |
| Total | 159 | 164 | 323 | 196 | 193 | 389 |

## SEGMENTED YoY OPERATING INCOME (LOSS) WATERFALLS

Containerboard (millions of CANS)


Specialty Products (millions of CANS)

(1) Please click here for supplemental information on non-IFRS measures.

Boxboard Europe (millions of CAN\$)


Tissue Papers (millions of CAN\$)


## SEGMENTED SEQUENTIAL OPERATING INCOME (LOSS) WATERFALLS

Containerboard (millions of CANS)


Specialty Products (millions of CANS)


Boxboard Europe (millions of CANs)


Tissue Papers (millions of CANs)

(1) Please click here for supplemental information on non-IFRS measures.

## FINANCIAL REVIEW



## KEY PERFORMANCE INDICATORS (KPIs)

Total Shipments ${ }^{1}$ ('000 s.t.)


LTM Return on Assets


Capacity Utilization Rate ${ }^{1-2}$ (manufacturing only)


LTM Working Capital (\% of LTM Sales)


## YEAR OVER YEAR SALES RECONCILIATION



| (M CAN\$) | Sales <br> Q2-2018 | Business <br> acquisitions | Price \& Mix | F/X CAN\$ | Other <br> Variances |  <br> Recycling | Volume | Sales |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q2-2019 |  |  |  |  |  |  |  |  |$|$

Strong sales driven by business acquisitions, improved price \& sales mix in Tissue, and favourable FX for N.A. operations; Offsetting this were lower volumes in Tissue and Containerboard, and lower results in Recovery activities

## SEQUENTIAL SALES RECONCILIATION



Sequential sales increase driven by better seasonal volumes in N.A. operations, partially offset by less favourable pricing and mix in all segments except Tissue; Lower recycled fibre pricing negatively impacted recovery results

YEAR-OVER-YEAR OPERATING INCOME RECONCILIATION


SEQUENTIAL OPERATING INCOME RECONCILIATION


Sequential Tissue Papers increase reflects higher volumes \& selling price, favourable sales mix; Improvement in Containerboard driven by lower raw material prices and higher volumes; Sequentially stable results from Boxboard Europe \& Specialty Products

## QUARTERLY YEAR-OVER-YEAR EPS VARIANCE

## OIBD ${ }^{1}$

Depreciation

## Operating income

Financing expenses \& interest expense on employee future benefits and other liabilities FX gain on LT debt and financial instruments
Share of results of associates and JVs

## Profit before tax

Provision for income taxes
Non-controlling interests

## Net earnings

per share


## QUARTERLY SEQUENTIAL EPS VARIANCE

OIBD ${ }^{1}$
Depreciation

## Operating income

Financing expenses \& interest expense on employee future benefits and other liabilities FX gain on LT debt and financial instruments
Share of results of associates and JVs

## Profit before tax

Provision for income taxes
Non-controlling interests
Net earnings
per share

| Q1-2019 |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Adjusted ${ }^{1}$ | Specifics ${ }^{1}$ | As reported |
|  | 135 | 4 | 139 |
|  | (67) | - | (67) |
|  | 68 | 4 | 72 |
|  | (39) | - | (39) |
|  | - | 6 | 6 |
|  | 2 | - | 2 |
|  | 31 | 10 | 41 |
|  | (9) | 1 | (8) |
|  | (9) | - | (9) |
|  | 13 | 11 | 24 |
| \$ | 0.14 \$ | 0.12 | \$ 0.26 |

Q2-2019

| Q2-2019 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Adjusted ${ }^{1}$ |  | Specifics ${ }^{1}$ | As reported |  |
|  | 156 | (2) |  | 154 |
|  | (72) | - |  | (72) |
|  | 84 | (2) |  | 82 |
|  | (41) | 6 |  | (35) |
|  | - | 1 |  | 1 |
|  | 2 | - |  | 2 |
|  | 45 | 5 |  | 50 |
|  | (10) | - |  | (10) |
|  | (9) | - |  | (9) |
|  | 26 | 5 |  | 31 |
| \$ | 0.28 \$ | 0.05 | \$ | 0.33 |


| Change in after-tax results normalized at $26 \%$ | $\$$ | 0.11 | Higher operating income partly offset by higher <br> depreciation and interest expense |
| :--- | :--- | :--- | :--- |
| Change in income taxes provision vs normalized <br> tax rate at $26 \%$ | $\$$ | 0.03 | Utilization of unrecognized tax losses in Boxboard <br> Europe |
|  | $\mathbf{\$}$ | $\mathbf{0 . 1 4}$ |  |

## Q2-19 ADJUSTED OIBD TO OPERATING INCOME RECONCILIATION



| (M CAN\$) | Containerboard | Boxboard Europe | Specialty <br> Products | Tissue Papers | Corporate <br> Activities | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Operating income (loss) | 84 | 19 | 6 | 1 | (28) | 82 |
| Specific items: |  |  |  |  |  |  |
| Gain on acquisitions, disposals and others | - | - | - | - | 3 | 3 |
| Restructuring costs | - | - | - | 1 | - | 1 |
| Unrealized gain on financial instruments | (1) | - | - | - | (1) | (2) |
| Total Specific items | (1) | - | - | 1 | 2 | 2 |
| Adjusted operating income (loss) ${ }^{1}$ | 83 | 19 | 6 | 2 | (26) | 84 |
| Depreciation and amortization | 30 | 11 | 7 | 16 | 8 | 72 |
| Adjusted OIBD ${ }^{1}$ | 113 | 30 | 13 | 18 | (18) | 156 |

## NET EARNINGS - IFRS VS ADJUSTED

|  | NET EARNINGS | NET EARNINGS PER SHARE ${ }^{1}$ |  |
| :---: | :---: | :---: | :---: |
| (in millions of Canadian dollars, except amount per share) | Q2-2019 | Q2-2019 |  |
| As per IFRS | 31 | \$ | 0.33 |
| Specific items: |  |  |  |
| Loss on acquisitions, disposals and others | 3 | \$ | 0.03 |
| Restructuring costs | 1 | \$ | 0.01 |
| Unrealized gain on financial instruments | (2) | \$ | (0.02) |
| Foreign exchange gain on long-term debt \& financial instruments | (1) | \$ | (0.01) |
| Unrealized gain on option fair value | (6) | \$ | (0.06) |
| Tax effect on specific items, other tax adjustments and attributable to non-controlling interest ${ }^{1}$ | - |  | - |
|  | (5) | \$ | (0.05) |
| Adjusted ${ }^{2}$ | 26 |  | 0.28 |

(1) Specific amounts per share are calculated on an after-tax basis and are net of the portion attributable to non-controlling interest.
(2) Please click here for supplemental information on non-IFRS measures.

CASH FLOW OVERVIEW


Increased year-over-year and sequential Q2 Adjusted FCF reflects higher Cash Flow from Operations and lower capital payments
(1) Specific items: premiums paid on the repurchase of long-term debt and restructuring costs.
(2) Excluding increase in investments.
(3) Please click here for supplemental information on non-IFRS measures.
(4) Paid to our shareholders and to non-controlling interests.
(5) Net of disposals of $\$ 81$ million.

NET DEBT¹ RECONCILIATION - Q2 2019


Strong Cash Flow from Operations and favourable FX rate partially offset by acquisition, capital expenditures, capital lease acquisitions, and changes in non-cash WC components

## CONSOLIDATED FINANCIAL RATIOS \& DEBT MATURITIES

## Net Debt / LTTM Adjusted OIBD1



## Net Debt / Net Debt + Total Equity



## Interest Coverage Ratio²



Long-Term Debt Maturities (as at June 30, 2019)


## Q2 2019 leverage ratio of $3.3 x^{3}$

Bank debt financial covenant ratios: Net funded debt to capitalization < $65 \%$ (currently at $48.67 \%$ ), interest coverage ratio > $2.25 x$ (currently at $4,27 x$ ).
(1) Please click here for supplemental information on non-IFRS measures.
(2) Last twelve months adjusted OIBD to financing expense.
(3) Pro-forma to include 2018 business acquisitions on a LTM basis as well as IFRS 16 annualized impact for 2019.

## CAPITAL INVESTMENTS

(in millions of Canadian dollars, including capitalization of IT projects and value of leases)

2019 planned capital expenditures

| Containerboard | $\$ 110 \mathrm{M}$ | to | $\$ 125 \mathrm{M}$ |
| :--- | :---: | :---: | :---: |
| Boxboard Europe | $\$ 35 \mathrm{M}$ | to | $\$ 45 \mathrm{M}$ |
| Specialty Products | $\$ 35 \mathrm{M}$ | to | $\$ 45 \mathrm{M}$ |
| Tissue Papers | $\$ 110 \mathrm{M}$ | to | $\$ 135 \mathrm{M}$ |
| Corporate \& IT | $\$ 40 \mathrm{M}$ | to | $\$ 50 \mathrm{M}$ |
| TOTAL | $\$ 330 \mathrm{M}$ | to | $\$ 400 \mathrm{M}$ |

## Including major projects:

- Modernization of Tissue converting assets ( $\pm$ \$80-100M)
- Start of the conversion of the Bear Island
facility to containerboard ( $\pm$ \$60M)
- Warehouse \& rolling equipment
replacement ( $\pm \$ 45 \mathrm{M}$ )


## CONCLUDING REMARKS

## AND

Q\&A


NEAR TERM FACTORS


- Raw materials: lower OCC price, positive trends in virgin pulp and SOP white recycled fiber grade
- Tissue: price increases announced in various products and sub-segments
- Boxboard Europe: year-over-year volume benefit related to acquisition of Barcelona Cartonboard
- Specialty Products: year-over-year contribution from U.S. acquisition in Q4 2018

- Tissue: ongoing market-related challenges
- Containerboard: potential for pricing \& volume headwinds
- Specialty Products: negative impact of lower recycled fibre prices on Recovery performance
- Boxboard Europe: seasonal third quarter softness and holiday-related closure; lower pricing

| Q3 2019 | Containerboard Packaging |  | Boxboard Europe ${ }^{1}$ |  | Specialty Products |  | Tissue Papers |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| O\|BD ${ }^{2}$ Trend | $\begin{gathered} \text { YoY } \\ \uparrow \end{gathered}$ | QoQ $\uparrow$ | $\underset{\uparrow}{\text { YoY }}$ | QoQ $\downarrow$ | $\underset{\leftrightarrow}{\text { YoY }}$ | $\underset{\leftrightarrow}{\text { QoQ }}$ | $\begin{gathered} \text { YoY } \\ \uparrow \end{gathered}$ | $\underset{\leftrightarrow}{\text { QoQ }}$ |
| REFLECTING: |  |  |  |  |  |  |  |  |
| VOLUME | $\Leftrightarrow$ | 7 | 7 | V | 7 | $\leftrightarrow$ | $\geq$ | 7 |
| SELLING PRICE | V | V | V | v | $\stackrel{\square}{+}$ | $\leftrightarrow$ | 7 | 7 |
| RAW MATERIAL COST ${ }^{3}$ | V | $\Leftrightarrow$ | V | I | V | , | V | V |
| EXCHANGE RATE | $\leftrightarrow$ | $\leftrightarrow$ | V | $\stackrel{\square}{\bullet}$ | $\leftrightarrow$ | $\leftrightarrow$ | $\leftrightarrow$ | $\leftrightarrow$ |
| ENERGY COST | $\leftrightarrow$ | $\leftrightarrow$ | $\geq$ | V | $\Leftrightarrow$ | $\Leftrightarrow$ | $\Leftrightarrow$ | $\Leftrightarrow$ |

## IMPACT OF NEW IFRS 16 - ACCOUNTING FOR LEASES

| Impact on the Statements of Earnings* <br> (in millions of Canadian dollars) | Q2-2019 | YTD 2019 | 2019 annualized <br> impact |
| :--- | :---: | :---: | :---: |
| OIBD |  |  |  |
| Containerboard | 3 | 6 | 12 |
| Europe | 1 | 2 | 4 |
| Specialty Products | 1 | 3 | 7 |
| Tissue Papers | 1 | 2 | 4 |
| Corporate | 1 | 2 | 3 |
| Increase in OIBD (total) | 7 | 15 | 30 |
| Increase in depreciation | 6 | 13 | 27 |
| Increase in financial expenses | 1 | 2 | 3 |
|  |  | As of January |  |
| Impact on the Balance Sheet* |  | 1 st, 2019 |  |
| Increase in assets |  | 87 |  |
| Increase in debt |  | 99 |  |
| Decrease in deferred income tax liabilities |  | (3) |  |
| Decrease in equity |  | (9) |  |

## APPENDIX



## SELECTED REFERENCE PRICES



|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $?$ | 5 | Q | A | D | ㄷ | 3 P |  | C | Q | 0 |  |  |  |  |
|  | Q1 | Q2 | Q3 | Q4 | 2017 | Q1 | Q2 | Q3 | Q4 | 2018 | Q1 | $\begin{gathered} 2019 \\ \text { Q2 } \end{gathered}$ | $\begin{gathered} \text { Q2 } 2019 \text { vs } \\ \text { Q2 } 2018 \end{gathered}$ |  | $\begin{gathered} \text { Q2 } 2019 \text { vs } \\ \text { Q1 } 2019 \end{gathered}$ |  |
| These indexes should only be used as an indicator of trends and they may be different than our actual selling prices or purchasing costs. |  |  |  |  | Year |  |  |  |  | Year |  |  | (units) | (\%) | (units) | (\%) |
| Selling prices (average) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PACKAGING PRODUCTS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Containerboard (US\$/short ton) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Linerboard 42-lb. unbleached kraft, Eastern US (open market) | 655 | 705 | 705 | 705 | 693 | 722 | 755 | 755 | 755 | 747 | 752 | 735 | (20) | (3)\% | (17) | (2)\% |
| Corrugating medium $26-\mathrm{lb}$. semichemical, Eastern US (open market) | 540 | 590 | 617 | 620 | 592 | 637 | 670 | 670 | 670 | 662 | 650 | 640 | (30) | (4)\% | (10) | (2)\% |
| Boxboard Europe (euro/metric ton) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Recycled white-lined chipboard (WLC) index ${ }^{1}$ | 649 | 680 | 680 | 680 | 672 | 678 | 673 | 673 | 673 | 674 | 672 | 672 | (1) | - | - | - |
| Virgin coated duplex boxboard (FBB) index² | 1,031 | 1,031 | 1,031 | 1,031 | 1,031 | 1,072 | 1,072 | 1,072 | 1,072 | 1,072 | 1,117 | 1,117 | 45 | 4\% | - | - |
| Specialty Products (US\$/short ton) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Uncoated recycled boxboard - 20-pt. bending chip (series B) | 622 | 660 | 660 | 640 | 645 | 643 | 680 | 730 | 730 | 696 | 730 | 730 | 50 | 7\% | - | - |
| TISSUE PAPERS (US\$/short ton) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Parent rolls, recycled fibres (transaction) | 1,023 | 1,040 | 1,053 | 1,057 | 1,043 | 1,072 | 1,087 | 1,102 | 1,112 | 1,093 | 1,151 | 1,164 | 77 | 7\% | 13 | 1\% |
| Parent rolls, virgin fibres (transaction) | 1,297 | 1,320 | 1,334 | 1,339 | 1,323 | 1,366 | 1,388 | 1,404 | 1,422 | 1,395 | 1,441 | 1,444 | 56 | 4\% | 3 | - |
| Raw material (average) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| RECYCLED PAPER |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| North America (US\$/short ton) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sorted residential papers, No. 56 (SRP - Northeast average) | 92 | 76 | 86 | 63 | 79 | 59 | 31 | 28 | 28 | 36 | 24 | 16 | (15) | (48)\% | (8) | (33)\% |
| Old corrugated containers, No. 11 (OCC - Northeast average) | 142 | 148 | 162 | 99 | 138 | 92 | 71 | 68 | 68 | 74 | 61 | 40 | (31) | (44)\% | (21) | (34)\% |
| Sorted office papers, No. 37 (SOP - Northeast average) | 173 | 172 | 170 | 160 | 169 | 165 | 193 | 210 | 203 | 193 | 183 | 140 | (53) | (27)\% | (43) | (23)\% |
| Europe (euro/metric ton) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Recovered paper index ${ }^{3}$ | 147 | 138 | 147 | 135 | 142 | 111 | 99 | 103 | 106 | 105 | 98 | 86 | (13) | (13)\% | (12) | (12)\% |
| VIRGIN PULP (US\$/metric ton) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Northern bleached softwood kraft, Canada | 1,033 | 1,093 | 1,110 | 1,183 | 1,105 | 1,233 | 1,310 | 1,377 | 1,428 | 1,342 | 1,380 | 1,292 | (18) | (1)\% | (88) | (6)\% |
| Bleached hardwood kraft, mixed, Canada/US | 853 | 942 | 985 | 1,052 | 958 | 1,077 | 1,125 | 1,192 | 1,213 | 1,152 | 1,180 | 1,100 | (25) | (2)\% | (80) | (7)\% |

Sources: RISI, Cascades and Reno de Medici.
(1) The index is based on publication prices and represents an approximation of Cascades' recycled grades selling prices in Europe. It is weighted by country.
(2) The index is based on publication prices and represents an approximation of Cascades' virgin grades selling prices in Europe. It is weighted by country.
(3) The recovered paper index is based on publication prices and represents an approximation of Cascades' recovered paper purchase prices in Europe. It is weighted by country.
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## GREEN BY NATURE"

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[^0]:    (1) Please click here for supplemental information on non-IFRS measures.
    (2) 2018 fourth quarter results have been adjusted to reflect retrospective adjustments of purchase price allocation. Please refer to Note 5 of

