

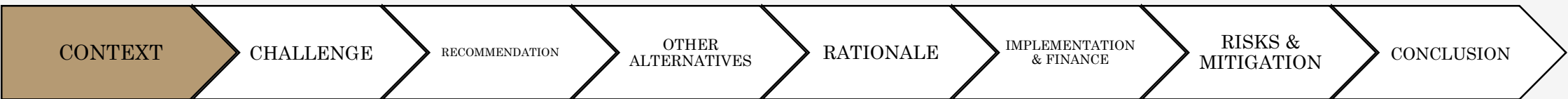
SCHULICH SCHOOL OF BUSINESS

Prepared for the McGill St. Laurent

Prepared by Akram, Harris, Kirthika & Leon

CONTEXT

McGill St. Laurent is a commodity trading firm that is involved in three main ventures: energy trading, grain trading and wholesaler of wood and lumber products (manufacturing, export and architectural).



CONTEXT

CWP Energy

Competitors: High barriers to entry

Suppliers & Customers: North American deregulated market

Grain St. Laurent

Competitors: Highly competitive

Suppliers: Grain processes, farms and resellers

Customers: Feed mills, ethanol producers, farm and international trading firms

CONTEXT

CHALLENGE

RECOMMENDATION

OTHER
ALTERNATIVES

RATIONALE

IMPLEMENTATION
& FINANCE

RISKS &
MITIGATION

CONCLUSION

CONTEXT

Canadian Wood Products

Competitors: Buy directly from sawmill

Suppliers: NA suppliers

Customers: Manufacturers, industrial manufacturers, lumber retailers

Canadian Wood Products – Architectural Product Company

Competitors: Other speciality wood distributors

Suppliers: Range of suppliers including high-end European manufacturers

Customers: B2B (architects etc.) & B2C (Amazon etc.)

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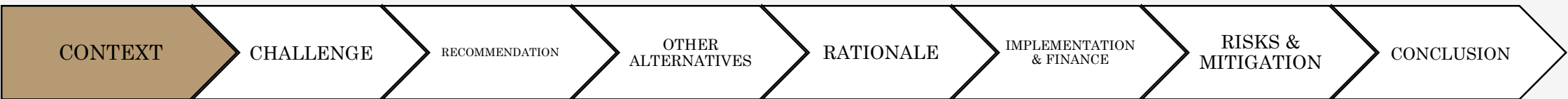
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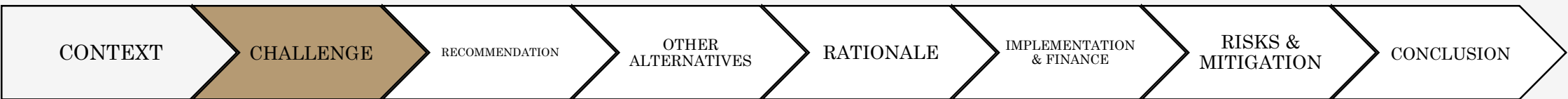
MCGILL ST. LAURENT

- *Strengths: Quality in service, human capital & competitive advantage*
- *Weaknesses: Unprepared for technological disruption*
- *Opportunities: Capitalize on disruptive technology*
- *Threats: Highly competitive market*



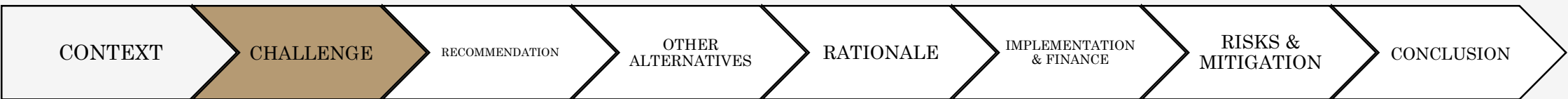
MAIN CHALLENGE

There is a need to integrate disruptive technology successfully, through leveraging the strengths of the company – namely human, financial and technological capital.



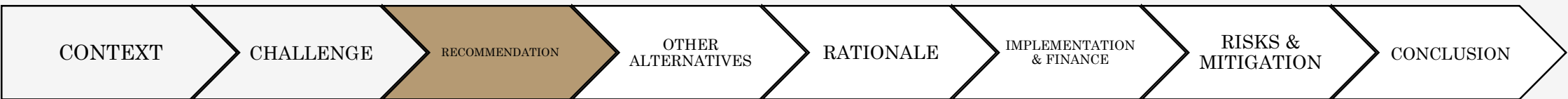
MAIN ASSUMPTIONS

- *1) The relevance of block chain technology in the future*
- *2) Economic growth will drive the demand for limestone*



RECOMMENDATION

- *1) Enter limestone commodity market by establishing Canadian limestone production business*
- *2) Build up block-chain technology by hiring 5 IT staff*
- *3) Develop commodity trading platform based on block-chain technology*
- *4) In the long-term, integrate the AI capacities with blockchain to establish new standard in commodity trading market.*



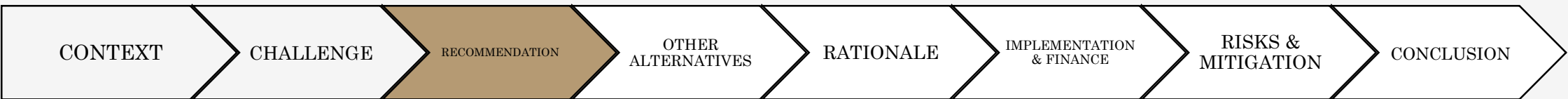
PLATFORM

- *Blockchain platform will connect the suppliers, MS and the traders.*
- *The platform includes an option to be on the web or through mobile (Android/Apple OS)*
- *Ability to add unlimited suppliers/clients*
- *MS does its business through established relationships and hence marketing costs are limited*



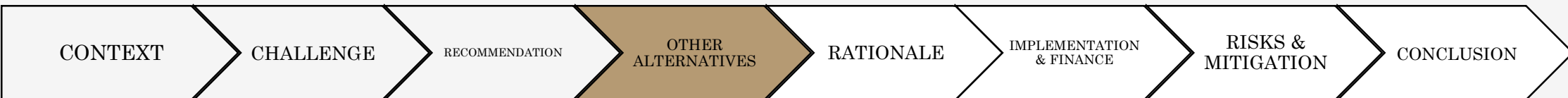
PLATFORM

- *Further exposure to the platform is conducted through the advertisement on LinkedIn*
- *Customers have the option to buy the commodity at either the current or future price, hence futures trading option is added to the platform*
- *The payment system is connected to the banks and credit card company.*



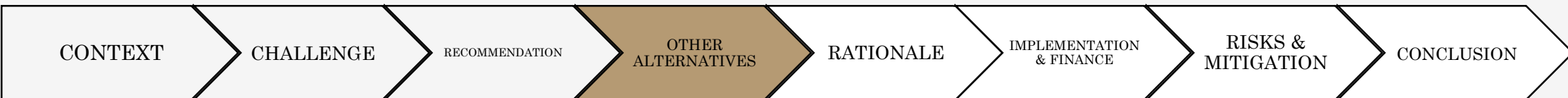
OTHER ALTERNATIVES CONSIDERED

*To create AI based telephone system to
conduct trading operations.*



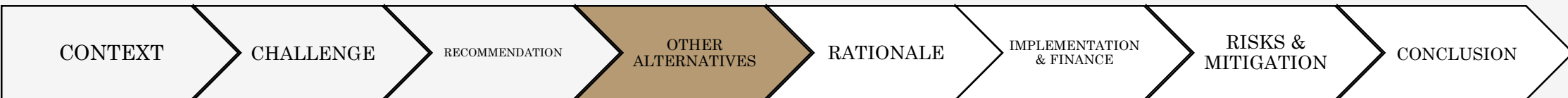
OTHER ALTERNATIVES CONSIDERED

Advantage: Helps in reducing human error, increasing speed of operating, caters to technological advancement & implementation cost is economical and can be developed within \$200 000




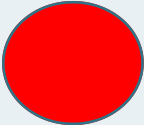
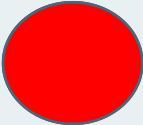



OTHER ALTERNATIVES CONSIDERED

Disadvantage: Disruptive but only for the short-term and market line research shows people prefer human voice over automated voice on telephone.



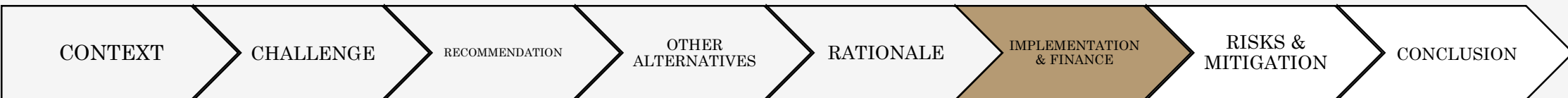
RATIONALE

| <i>Options</i> | <i>Criteria</i> | | |
|---------------------------|--|---|---|
| | <i>Market Growth Potential</i> | <i>Competitive Advantage</i> | <i>Return on Investment</i> |
| <i>Our Recommendation</i> |  |  |  |
| <i>Other Alternative</i> |  |  |  |



IMPLEMENTATION

- 1) *Enter limestone commodity market by establishing Canadian limestone production business*
 - 2018: 0-6 months
 - \$1 million
- 2) *Build up block-chain technology by hiring 5 IT staff*
 - 0-12 months
 - \$1.5 million (annually)
- 3) *Develop commodity trading platform based on block-chain technology*
 - 0-24 months
 - \$2 million (annually, assumes 0.5 million for infrastructure)
- 4) *In the long-term, integrate the AI capacities with blockchain to establish new standard in commodity trading market.*
 - 0-24 months
 - Existing operating expense (AI team + blockchain team)



FINANCIAL ANALYSIS

| Ratios | McGill StLaurent | CWP Energy | Grain StLaurent | Canadian Wood Products |
|------------------------------|------------------|---------------|-----------------|------------------------|
| Inventory Days | 28.45 | 108.09 | 5.77 | - |
| Receivable Days | 38.88 | 125.33 | 33.19 | 5.70 |
| Payable Days | 16.69 | 53.42 | 13.83 | 2.64 |
| Cash Cycle Conversion | 50.64 | 180.00 | 25.12 | 3.06 |
| Inventory Turnover (Times) | 12.65 | 3.33 | 62.37 | N/A |
| Return on Capital | 39% | 5% | 18% | 134% |



FINANCIAL ANALYSIS

| McGill StLaurent Financial Statements | McGill StLaurent | CWP | Grain StLaurent | CWP Energy |
|--|-----------------------------|---------------|-----------------|--------------|
| Balance Sheet | Amount in \$ Million | | | |
| Assets | | | | |
| Restricted Cash | 2.212 | - | - | 2.212 |
| Receivables | 20.102 | 16.776 | 1.379 | 1.947 |
| Prepays | 2.424 | - | - | 2.424 |
| Inventory | 13.613 | 13.391 | 0.222 | - |
| Fixed Assets | 4.526 | 4.526 | - | - |
| Goodwill | 0.110 | 0.110 | - | - |
| Total Assets | 42.987 | 34.803 | 1.601 | 6.583 |
| Liabilities | | | | |
| Accounts payable | 7.986 | 6.618 | 0.532 | 0.836 |
| Line of Credit | 18.583 | 16.871 | 0.502 | 1.210 |
| Long Term Debt | 2.664 | 1.664 | - | 1.000 |
| Stockholders Equity | 13.754 | 9.650 | 0.567 | 3.537 |
| Total Liability & Equity | 42.987 | 34.803 | 1.601 | 6.583 |

CONTEXT

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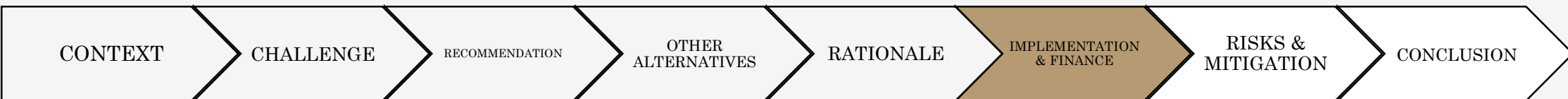
IMPLEMENTATION
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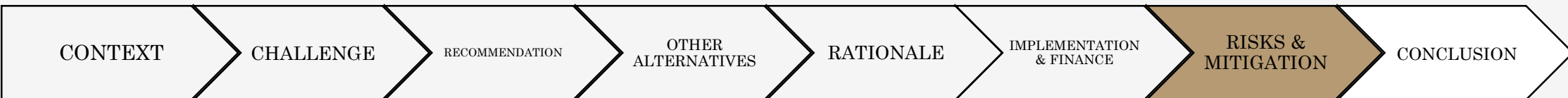
FINANCIAL ANALYSIS

| McGill StLaurent | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|--------------------------|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Financial Statements | Actual | | | | Projections | | |
| | Amount in \$ millions | | | | | | |
| Sales | 188.38 | 158.09 | 171.97 | 188.72 | 204.39 | 248.77 | 396.68 |
| Less: Cost of Sales | -180.17 | -147.04 | -155.77 | -174.66 | -189.16 | -227.04 | -355.95 |
| Gross Profit | 8.21 | 11.05 | 16.20 | 14.06 | 15.23 | 21.73 | 40.73 |
| Less: Operating Expenses | -7.17 | -7.71 | -9.63 | -8.72 | -10.88 | -14.48 | -18.42 |
| EBITDA | 1.04 | 3.34 | 6.57 | 5.34 | 4.34 | 7.24 | 22.31 |
| Gross Margin % | 4.36% | 6.99% | 9.42% | 7.45% | 7.45% | 8.73% | 10.27% |
| EBITDA % | 0.55% | 2.11% | 3.82% | 2.83% | 2.13% | 2.91% | 5.62% |



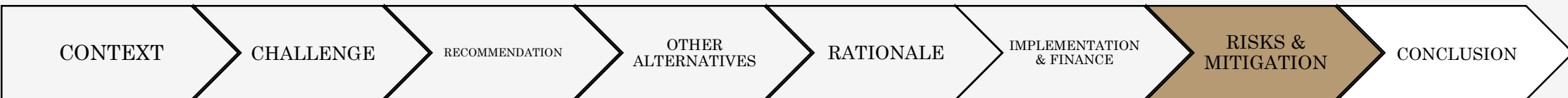
RISKS AND MITIGATION

- *Security Risk*
- *Proposed Mitigation Strategy: Maintain high-level tech expertise in-house and enhance technological expertise of the risk committee*



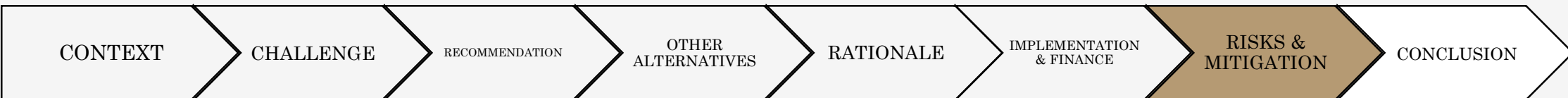
RISKS AND MITIGATION

- *Regulation Risks: Government may limit the use of blockchain technology*
- *Proposed Mitigation Strategy: Seek FinTech certification and accreditation – through leveraging current government contacts*



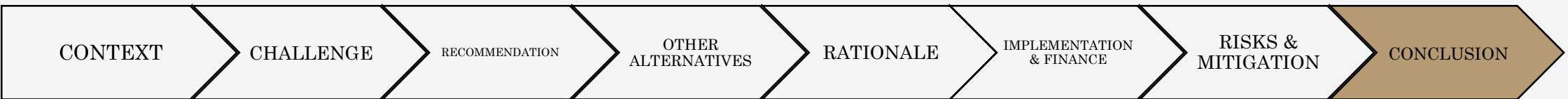
RISKS AND MITIGATION

- *Tech giant may launch competing trading platform product*
- *Proposed Mitigation Strategy: Build industry alliance or coalition to implement the platform as an industry-wide standard.*



CONCLUSION

The blockchain based platform meets the disruptive technology criteria that would help MS be a world-leading trading company.



| McGill StLaurent | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | |
|--------------------------|-----------------------|---------|---------|---------|-------------|---------|---------|--|
| Financial Statements | Actual | | | | Projections | | | |
| | Amount in \$ millions | | | | | | | |
| Sales | 188.38 | 158.09 | 171.97 | 188.72 | 204.39 | 248.77 | 396.68 | |
| - CWP Energy | 64.94 | 51.50 | 64.33 | 48.86 | 51.30 | 59.00 | 73.74 | |
| - Grain St Laurent | 15.83 | 23.46 | 13.80 | 15.17 | 15.93 | 18.31 | 22.89 | |
| - Canadian Wood Products | 107.62 | 83.12 | 93.84 | 124.69 | 137.16 | 171.46 | 300.05 | |
| Less: Cost of Sales | -180.17 | -147.04 | -155.77 | -174.66 | -189.16 | -227.04 | -355.95 | |
| - CWP Energy | 61.42 | 47.90 | 58.27 | 45.22 | 47.48 | 54.60 | 68.25 | |
| - Grain St Laurent | 16.52 | 21.82 | 12.50 | 14.04 | 14.74 | 16.95 | 21.19 | |
| - Canadian Wood Products | 102.24 | 77.31 | 85.00 | 115.40 | 126.95 | 155.49 | 266.52 | |
| Gross Profit | 8.21 | 11.05 | 16.20 | 14.06 | 15.23 | 21.73 | 40.73 | |
| - CWP Energy | 3.52 | 3.60 | 6.06 | 3.64 | 3.82 | 4.40 | 5.49 | |
| - Grain St Laurent | -0.69 | 1.64 | 1.30 | 1.13 | 1.19 | 1.36 | 1.71 | |
| - Canadian Wood Products | 5.38 | 5.81 | 8.84 | 9.29 | 10.22 | 15.97 | 33.53 | |
| Less: Operating Expenses | -7.17 | -7.71 | -9.63 | -8.72 | -10.88 | -14.48 | -18.42 | |
| EBITDA | 1.04 | 3.34 | 6.57 | 5.34 | 4.34 | 7.24 | 22.31 | |
| - CWP Energy | 2.17 | 1.99 | 3.11 | 0.50 | 0.41 | 0.68 | 2.09 | |
| - Grain St Laurent | -1.55 | 0.27 | 0.23 | 0.10 | 0.08 | 0.14 | 0.42 | |
| - Canadian Wood Products | 0.42 | 1.08 | 3.23 | 4.74 | 3.86 | 6.43 | 19.80 | |
| Total Gross Margin | 4.36% | 6.99% | 9.42% | 7.45% | 7.45% | 8.73% | 10.27% | |
| Total EBITDA | 0.55% | 2.11% | 3.82% | 2.83% | 2.13% | 2.91% | 5.62% | |