

The background of the slide features two men in blue work uniforms and white hard hats. The man on the left is wearing a white hard hat with 'drax' and 'Energize' written on it, and is looking towards the man on the right. The man on the right is wearing a white hard hat with 'drax' written on it and is smiling. Both are wearing blue work jackets with yellow reflective stripes and 'drax' logos. The background is a blurred outdoor setting, likely a construction or mining site.

Economic Impacts of Drax Group's Canadian Operations

Prepared for Drax Group

July 2024

Executive Summary

Drax Group (Drax) is an energy company that manufactures wood pellets for its own electricity generation as well as for sale to customers across the globe. Drax engaged MNP LLP (MNP) to undertake a study of the economic impact of its Canadian operations.

Key Findings



Drax supports the communities where it operates

- Drax's plants purchased between 45 percent and 65 percent of the dried fibre, goods and services used to operate its plants from suppliers within the local regions. Goods and services include maintenance and repair services, truck transportation and professional services.
- Approximately 75 percent of supplier purchases made by Drax are from suppliers within the respective province of its operations.
- Property taxes paid by Drax account for up to eight percent of the municipal taxes collected in the communities it operates in.



Drax provides good quality jobs to people in communities

- Approximately half of Drax's workforce are in skilled trades, management or corporate positions that require a post-secondary credential, Red Seal certification and/or significant experience.
- Drax's pellet plants account for a significant portion of employment and income in the communities in which it operates (up to 26 percent in one community).



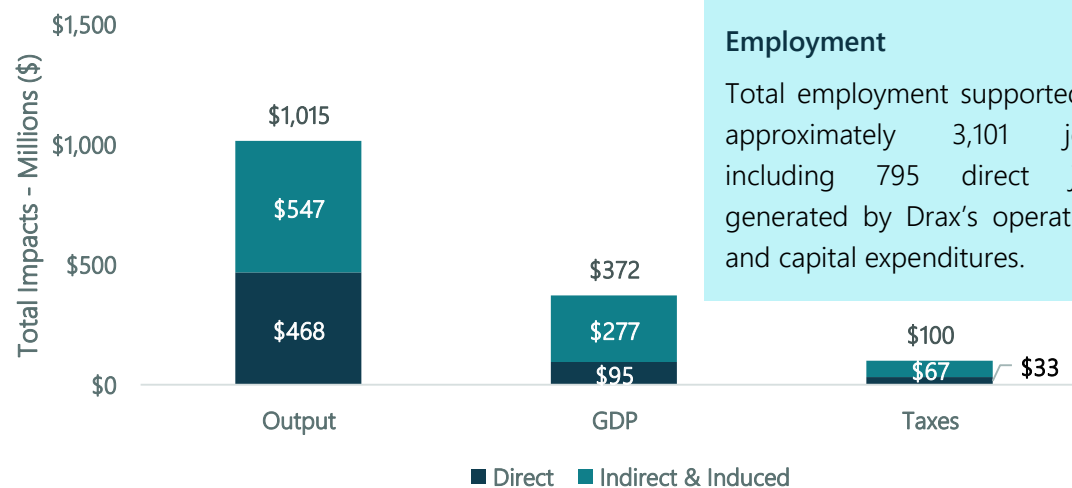
Drax plays a vital role in the forest sector value chain

- Companies such as local sawmills rely on Drax to purchase their residuals and by-products. The use of these residual and by-products by Drax also keeps them out of landfills and off forests floors.
- Service workers employed in companies that supply to Drax depend on the company for their livelihoods. They include maintenance and repair workers, those in the utility and transportation sectors, as well as those providing professional services.

Economic Footprint in Canada

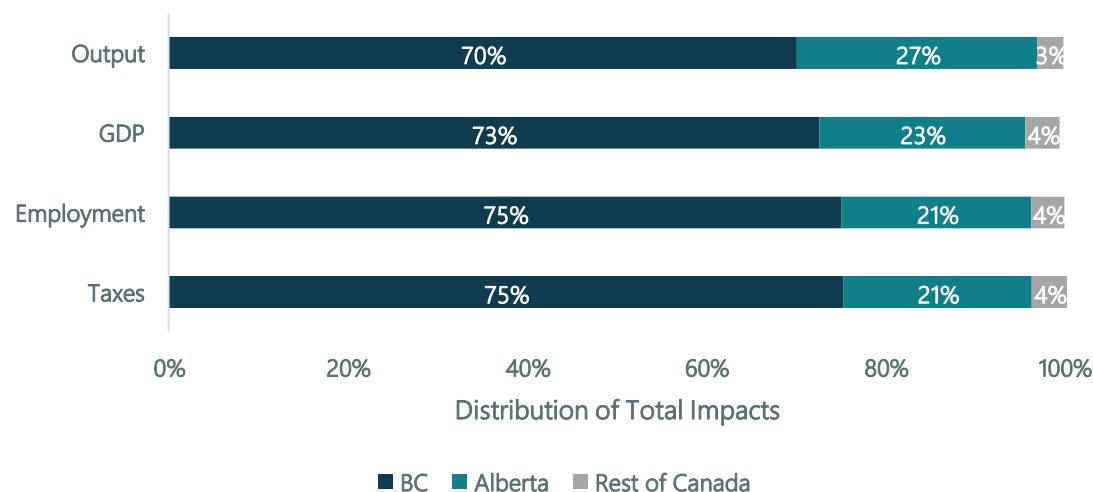
Canadian Operations 2023 Economic Impact

- 8 pellet plants in British Columbia
- 2 pellet plants in Alberta
- 2 corporate offices in British Columbia
- 1 port terminal in British Columbia



Employment
 Total employment supported of approximately 3,101 jobs, including 795 direct jobs generated by Drax's operations and capital expenditures.

Comparison
 The total employment supported by Drax's operations (3,101 jobs) is approximately equivalent to the employment supported by the construction of 1,447 new homes in Canada.



Introduction

Background and Purpose

Drax Group (Drax) is a United Kingdom-based energy company that produces and sells electricity generated from biomass. The company has 10 manufacturing facilities in Canada, producing wood pellets for its own electricity generation and for sale to customers in Europe and Asia. Drax also has two corporate offices and a port terminal to support its operations in Canada.

Drax engaged MNP LLP (MNP) to undertake a study of the economic impact of Drax's Canadian operations.

Study Scope

The scope of this study encompassed:

- Developing an overview of Drax's operations in Canada.
- Developing a description of Drax's value chain and its linkages with other industries.
- Developing a description of the scope and nature of employment created by Drax's facilities.
- Estimating the economic impacts generated by the operational and capital expenditures of Drax's operations in BC and Alberta.

Organization of the Report

The remainder of the report is organized as follows:

- Section 2 provides an overview of Drax's Canadian operations, its value chain and workforce.
- Section 3 contains estimates of the economic impacts associated with Drax's operations in BC and Alberta.
- The appendices provide the detailed economic impact methodology and detailed economic impact tables.

Limitations

This report is provided for information purposes and is intended for general guidance only. It should not be regarded as comprehensive or as a substitute for personalized, professional advice.

We have relied upon the completeness, accuracy and fair presentation of all information and data obtained from Drax and public sources, believed to be reliable. The accuracy and reliability of the findings and opinions expressed in the presentation are conditional upon the completeness, accuracy and fair presentation of the information underlying them. As a result, we caution readers not to rely upon any findings or opinions expressed for business or investment decisions and disclaim any liability to any party who relies upon them as such. Before taking any particular course of action, readers should contact their own professional advisor to discuss matters in the context of their particular situation.

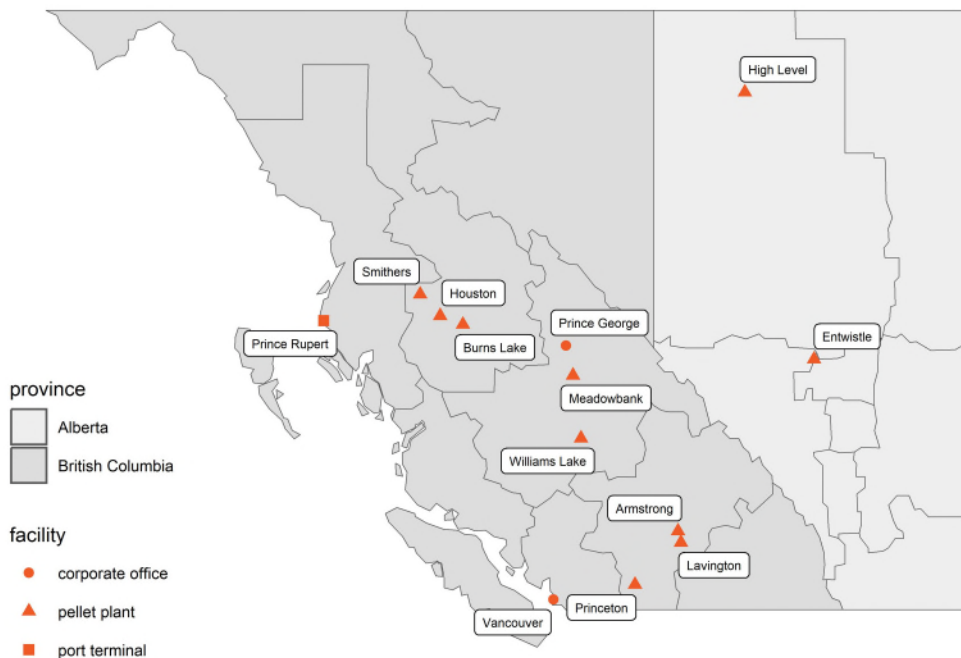
Additionally, the findings and opinions expressed in the presentation constitute judgments as of the date of the presentation and are subject to change without notice. MNP is under no obligation to advise of any change brought to its attention which would alter those findings or opinions.

Overview of Drax

Canadian Operations

Drax is a global biomass pellet manufacturer and power generator, based in the United Kingdom. In Canada, Drax operates 10 pellet plants and has 2 corporate offices and a port terminal. Figure 1 shows the distribution of Drax’s operations in Canada. Eight of the pellet plants are located in BC and two are in Alberta. Its Canadian corporate offices are located in Vancouver and Prince George. In addition, Drax owns and operates the Westview port terminal in Prince Rupert, to support its Canadian operations.

Figure 1: Drax’s Canadian Facilities



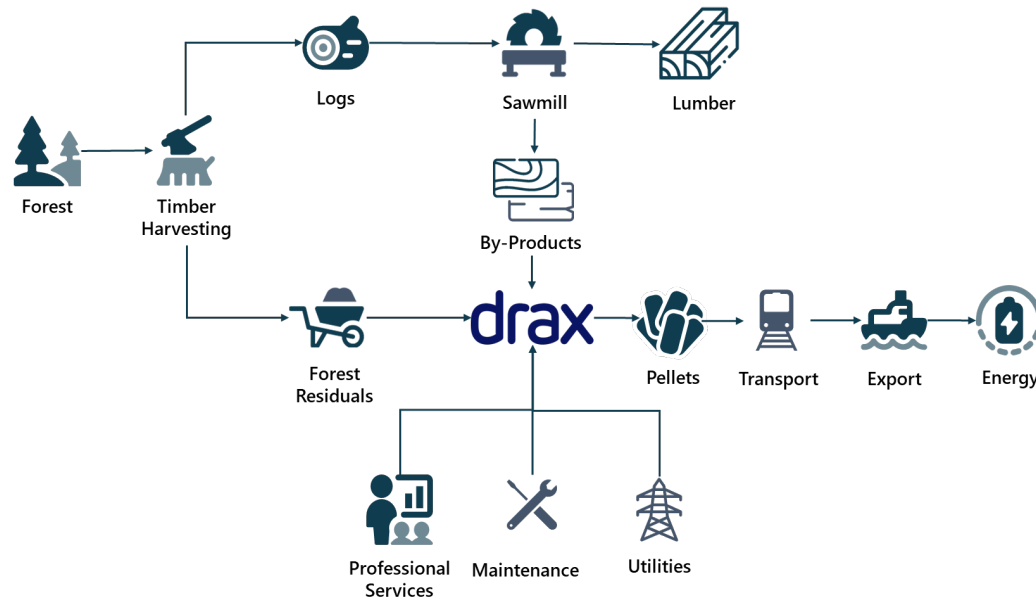
Role in Forestry Sector and Linkages with Other Industries

The economic activity created by Drax can be described in terms of the value chain. A value chain is a high-level model of how businesses receive raw materials as an input, add value to the raw materials through various processes, and distribute finished products to customers. It illustrates the cycle of activities for a firm or specific industry and shows the linkages with other industries. The value chain for Drax’s operations and its role in the forest sector is depicted in Figure 2.

Dried fibre is the primary input for pellet production and comes from both forest residuals and sawmill by-products. The majority of Drax’s dried fibre inputs come from harvesting operations and sawmills within the regions immediately surrounding its pellet plants. The finished product is mainly transported from the pellet plants by rail to either the Port of Vancouver or the Westview terminal. Pellets are then exported by ship to Drax’s generating facilities in the United Kingdom or to customers in Europe and

Asia. To support the operations of its facilities Drax employs contractors to provide maintenance services, most of whom are from the local region. In addition, it purchases a variety of professional services including legal services, accounting, administrative support, and technical advisory. These are sourced from suppliers within the local region, across the provinces they operate in, and across Canada.

Figure 2: Drax’s Value Chain and its Role in the Forest Sector



Workforce Overview

Drax’s pellet plants, port terminal and corporate offices employ workers across a broad spectrum of occupations. Over half of the workforce is employed in skilled positions, requiring a post-secondary credential, Red Seal certification and/or significant industry experience.

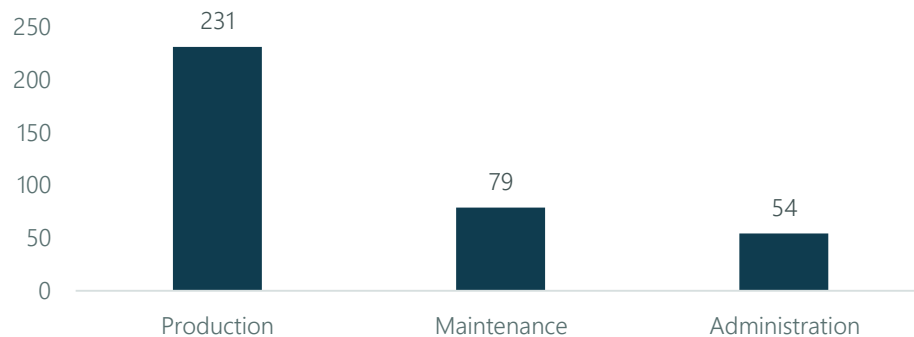
Type of Employment

Approximately 67 percent (364 positions) of Drax’s workforce is employed at its pellet plants. These are a combination of skilled and semi-skilled labour and management/administrative employees. As shown in Figure 3, the categories of employment at Drax’s pellet plants are:

- Production – These employees include machine operators, labourers, rail car loaders and cleaning staff. They are a mix of semi-skilled and unskilled labourers. Machine operators may require certifications to operate certain machinery, while other production positions generally do not require a formal certification.
- Maintenance – These employees are skilled tradespeople that include millwrights, heavy duty mechanics and electricians. They typically require a Red Seal certification and significant experience.

- Administration – These employees include plant managers, production supervisors, maintenance supervisors and clerical support. Managers and supervisors typically require 10 or more years of experience and may require a post-secondary degree or diploma in management, while clerical support positions may require a diploma or certificate or on-the-job training.

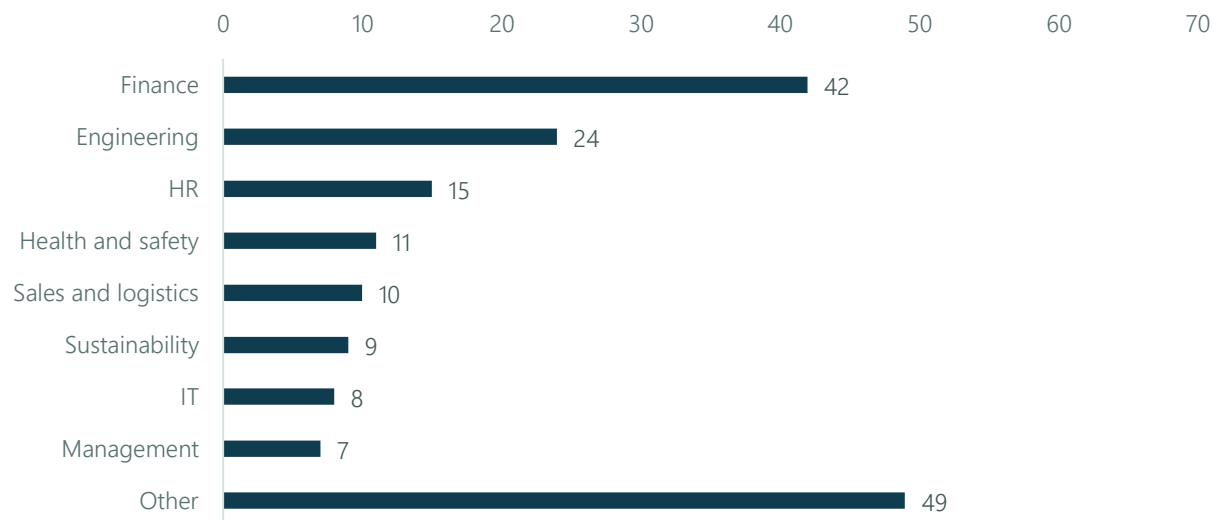
Figure 3: Pellet Plant Employment by Type (Number of Jobs)



Drax corporate offices employ 175 individuals (32 percent of its workforce). These are in a range of skilled occupations, the majority of which require post-secondary education and significant experience. As shown in Figure 4, the categories of employment at Drax’s corporate are:

- Finance – These employees maintain financial records and conduct capital budgeting and forecasting. They typically require a post-secondary degree and a professional accounting or finance certification (CPA, CFA).
- Engineering - These employees design and test equipment and facilities. They typically require a post-secondary degree and a professional certification (P.Eng.).
- Human resources - These employees recruit staff and design internal structures/systems. They typically require a post-secondary degree.
- Health and safety - These employees ensure facility safety systems are up to standards and train employees. They typically require a post-secondary diploma or certificate.
- Sales and logistics - These employees arrange buyers for pellet products and organize transportation of pellets and equipment. They may require post-secondary education and typically require significant experience.
- Sustainability - These employees implement environmental policies and standards. They typically require a post-secondary degree.
- IT – These employees ensure all computing hardware and software is operational. They typically require a post-secondary degree, certificate or diploma.
- Management - These employees oversee all staff and operations across all facilities, as well as conduct long-term planning. They require a post-secondary degree as well as post-graduate degree (MBA) and significant experience.
- Other – This includes legal, procurement, communications, automation, fibre supply, and reliability occupations. These positions require a range of experience and education.

Figure 4: Corporate Employment by Type (Number of Jobs)



Drax’s Westview port terminal employs four people in port terminal operations roles that include managing logistics and pellet inventory, this accounts for one percent of its workforce. These positions require a range of education and often require significant experience.

Wages and Size of Workforce

Drax’s pellet plants are important employers in the rural communities where they operate, providing skilled and well-paying jobs that contribute to the economic well-being of the respective communities. Drax’s employees spend their income at local grocery stores, restaurants, and other retailers and contribute to the municipal tax base through residential property taxes.

Table 1 shows Drax’s contribution to employment and income in the communities in which it operates pellet plants. In some communities, Drax’s pellet plants account for a significant portion of the local employment and overall income earned. For example, in Entwistle, AB, Drax employs a large number of the community’s workforce, providing approximately 26 percent of all jobs.¹ In Burns Lake, BC, Drax accounts for approximately 7 percent of employment and 18 percent of the employment income in the community.² In other communities Drax’s contribution to the share of employment and employment income are similar.

¹ Total Employment from Statistics Canada 2021 Census Profiles. Available here: <https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E>

² Total Employment from Statistics Canada 2021 Census Profiles. Available here: <https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E> Total Employment Income from Canada Revenue Agency. Available here: <https://www.canada.ca/en/revenue-agency/programs/about-canada-revenue-agency-cra/income-statistics-gst-hst-statistics/individual-tax-statistics-area-itsa/individual-tax-statistics-area-itsa-2023-edition-2021-tax-year.html#toc24>

³ Total Employment from Statistics Canada 2021 Census Profiles. Available here: <https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E>

⁴ Total Employment Income from Canada Revenue Agency. Available here: <https://www.canada.ca/en/revenue-agency/programs/about-canada-revenue-agency-cra/income-statistics-gst-hst-statistics/individual-tax-statistics-area-itsa/individual-tax-statistics-area-itsa-2023-edition-2021-tax-year.html#toc24>

Economic Impacts of Drax's Canadian Operations

Drax generates economic impacts within the local regions its facilities are located as well as across BC and Alberta. Impacts arise from direct expenditures on goods and services, the creation of employment and the generation of tax revenues for municipal, provincial and federal governments.

In general, economic impacts are viewed as being restricted to quantitative, well-established measures of economic activity. The most commonly used of these measures are output, GDP, employment, and government revenues:

- **Output** is the total gross value of goods and services produced by a given company or industry measured by the price paid to the producer. This is the broadest measure of economic activity.
- **Gross Domestic Product ("GDP")**, or value added, refers to the additional value of a good or service over the cost of inputs used to produce it from the previous stage of production. Thus, GDP is equal to the unduplicated value of goods and services produced.
- **Employment** is the number of jobs created.
- **Government Revenues** are the total amount of revenues generated for different levels of government. Tax revenues arise from personal income taxes, corporate income taxes, taxes on products, and taxes on production. Please note that because tax revenues can frequently change due to modifications in tax policy, the tax revenue impacts in this report are estimates only and subject to change. They should be viewed as approximate in nature.

Economic impacts may be estimated at the direct, indirect, and induced levels.

- **Direct impacts** are due to changes to "front end" businesses that would initially receive operating revenue as a direct consequence of the operations and activities of a facility or industry.
- **Indirect impacts** arise from changes in activity for suppliers of the "front end" businesses.
- **Induced impacts** arise from shifts in spending on goods and services as a consequence of changes to the payroll of the directly and indirectly affected businesses.

To estimate the economic impacts, MNP employed an input-output methodology that uses multipliers published by Statistics Canada. Input-output modeling is a widely-used and widely-accepted approach, making it recognizable by many different stakeholders and audiences. The structure of the approach also facilitates easy comparisons between reported results for different projects and facilities.

Data Sources

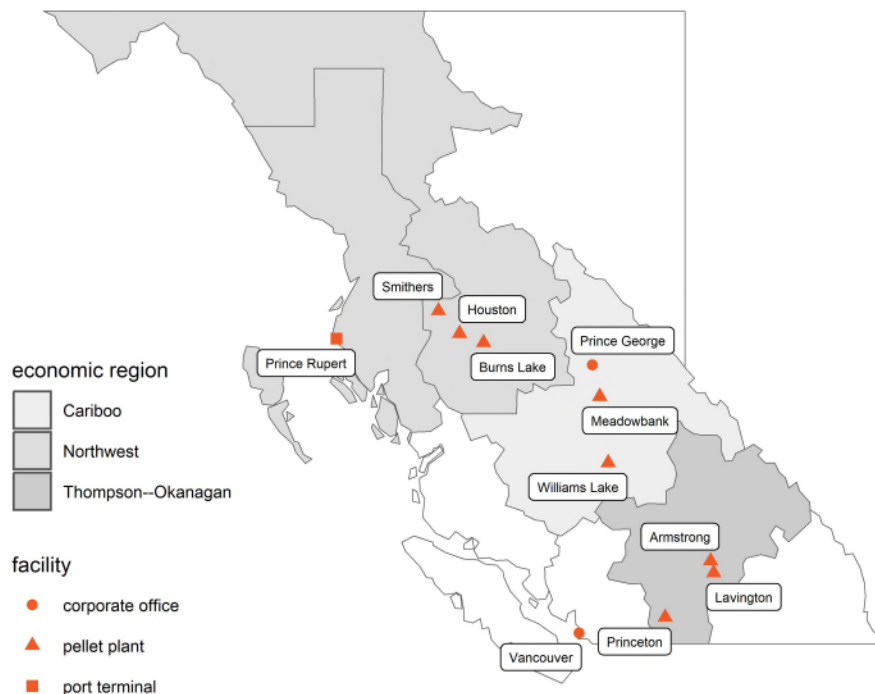
Information used in the study was gathered from both primary and secondary sources. These included:

- Drax administrative sources.
- Statistics Canada.

Economic Impacts - British Columbia Operations

Drax operates eight pellet plants in BC, as well as the Westview port terminal in Prince Rupert and corporate offices in Vancouver and Prince George. Figure 5 provides the regional distribution of Drax’s operations in BC. Drax’s corporate operations also include remote employees across BC. The corporate office and remote employees support the operations of all of Drax’s facilities in the province.

Figure 5: Drax’s Operations in BC



The following sections provide an overview of the Drax’s operations, by region, as well as the associated economic impacts generated by operational and capital expenditures.

Northwest

Drax operates three pellet plants (Burns Lake, Smithers, Houston) and one port terminal (Westview) in the Northwest region. The Burns Lake plant and Westview terminal are wholly owned and operated by Drax, while the Houston and Smithers plants are operated by Drax but are jointly owned with other partners. As shown in Table 2, the four facilities employed 127 people in 2023 and the three pellet plants produced 531,500 metric tonnes (MT) of pellets.

Table 2: Summary Operating Information, Northwest BC, 2023

Region	Employment (Jobs)	Pellets Produced (MT)
Northwest Total	127	531,500

Source: Drax

As shown in Table 3, approximately 57 percent of the overall \$119 million in operating expenditures for Drax’s Northwest facilities was spent at suppliers within the Northwest region and 24 percent was spent at suppliers in other parts of BC. For dried fibre purchases, nearly 80 percent were from suppliers within the region. Rail transportation accounted for approximately half of the goods and services purchased outside the province. Maintenance and other expenses were the next largest expenditure categories outside the province (20 percent each).

Table 3: Operating Expenditures, Northwest BC, 2023

Category	In-Region (\$ millions)	Rest of BC (\$ millions)	Rest of Canada (\$ millions)	Outside of Canada (\$ millions)	Total (\$ millions)
Dried Fibre	\$44	\$13	\$0	\$0	\$57
O&M, External Contractors, Facilities	\$7	\$7	\$2	\$2	\$18
Wages and Salaries	\$15	\$0	\$0	\$0	\$15
Rail	\$0	\$0	\$12	\$0	\$12
Utilities	\$0	\$3	\$2	\$0	\$5
Professional services	\$1	\$1	\$1	\$0	\$3
Other	\$1	\$4	\$4	\$0	\$9
Total	\$68	\$28	\$21	\$2	\$119

Source: Drax

Drax’s facilities in Northwest BC have **127 local employees** and source nearly **80 percent** of their **dried fibre** from the local region. In addition, **30 percent** of their dried fibre suppliers have a **Sustainable Forest Management** certificate, which indicates fibre is sourced legally and in an environmentally friendly manner.

Source: Drax

In addition to the operating expenditures required to run the facilities, Drax also makes capital expenditures to upgrade machinery and renovate its facilities. As shown in Table 4, Drax’s four facilities in the Northwest made approximately \$11.5 million in capital expenditures in 2023, of which 40 percent were from suppliers in the Northwest region.

Table 4: Summary Capital Expenditures, Northwest BC, 2023

	In-Region (\$ millions)	Rest of BC (\$ millions)	Outside of BC (\$ millions)	Total (\$ millions)
Total Capital Expenditures	\$4.61	\$4.61	\$2.30	\$11.52

Source: Drax

Table 5 provides the estimated economic impacts generated by Drax’s operating and capital expenditures at its four facilities in the Northwest region. In 2023 the facilities were estimated to have generated approximately:

- \$239 million in total output within the region, including \$131 million in direct output. In addition, \$51 million in indirect and induced impacts were generated in other parts of BC, and \$7 million in other parts of Canada.
- \$77 million in total GDP within the region, including \$23 million in direct GDP. In addition, \$28 million in indirect and induced impacts were generated in other parts of BC, and \$3 million in other parts of Canada.
- Total employment generated within the region of 653 jobs, including 199 direct jobs. In addition, 249 indirect and induced jobs were supported in other parts of BC, and 24 jobs in other parts of Canada.
- \$20 million in total tax revenues generated from spending within the region, including \$7 million in direct total taxes. In addition, \$7 million in indirect and induced taxes were generated from spending in other parts of BC, and \$0.7 million in other parts of Canada.

Table 5: Economic Impacts in Canada of Drax’s Northwest Facilities, 2023

	Output (\$ millions)	GDP (\$ millions)	Employment (Jobs)	Federal Tax (\$ millions)	Provincial Tax (\$ millions)	Municipal Tax (\$ millions)
Northwest Region						
Direct	\$131	\$23	199	\$1	\$5	\$1
Indirect & Induced	\$108	\$54	454	\$6	\$6	\$1
Total	\$239	\$77	653	\$7	\$11	\$2
Rest of BC						
Indirect & Induced	\$51	\$28	249	\$3	\$3	\$1
Rest of Canada						
Indirect & Induced	\$7	\$3	24	\$0.3	\$0.3	\$0.1
Total in Canada						
Direct	\$131	\$23	199	\$1	\$5	\$1
Indirect & Induced	\$166	\$85	727	\$9.3	\$9.3	\$2.1
Total	\$297	\$108	926	\$10.3	\$14.3	\$3.1

Municipal Tax Impacts

Drax facilities in the Northwest region paid over \$1 million in taxes to their local municipalities. These taxes accounted for between **two and eight percent** of the respective **municipal taxes** collected in the these communities. These tax contributions support services like waste collection, the fire department, road and infrastructure upgrades, and public parks.

Source: Drax and BC Government, *Municipal Tax Rates and Tax Burden*, Available here:

<https://www2.gov.bc.ca/gov/content/governments/local-governments/facts-framework/statistics/tax-rates-tax-burden>

Cariboo

Drax operates two pellet plants (Williams Lake and Meadowbank) in the Cariboo region, both of which are wholly owned by Drax. As shown in Table 6, these two facilities employed 76 people in 2023 and produced 319,800 MT of pellets.

Table 6: Summary Operating Information, Cariboo BC, 2023

Region	Employment (Jobs)	Pellets Produced (MT)
Total	76	319,800

Source: Drax

As shown in Table 7, approximately 63 percent of the overall \$66 million in operating expenditures for Drax's Cariboo facilities was spent at suppliers within the Cariboo region, and 15 percent was spent at suppliers in other parts of BC. For dried fibre purchases, over 90 percent were from suppliers within the region. Rail transportation accounted for approximately two thirds of the purchases from outside the province. Maintenance related expenses was the next largest expenditure category outside of the province (approximately 13 percent).

Table 7: Operating Expenditures, Cariboo BC, 2023

Category	In-Region (\$ millions)	Rest of BC (\$ millions)	Rest of Canada (\$ millions)	Outside of Canada (\$ millions)	Total (\$ millions)
Dried Fibre	\$27	\$2	\$0	\$0	\$30
O&M, External Contractors, Facilities	\$4	\$4	\$1	\$1	\$10
Rail	\$0	\$0	\$10	\$0	\$10
Wages and Salaries	\$9	\$0	\$0	\$0	\$9
Utilities	\$0	\$2	\$1	\$0	\$3
Professional services	\$1	\$1	\$0	\$0	\$2
Other	\$1	\$1	\$1	\$0	\$3
Total	\$42	\$10	\$13	\$1	\$66

Source: Drax

Drax's facilities in the Cariboo region have **76 local employees** and source over **90 percent** of their **dried fibre** from the local region. In addition, **50 percent** of their dried fibre suppliers have a **Sustainable Forest Management** certificate, which indicates fibre is sourced legally and in an environmentally friendly manner.

Source: Drax

In addition to the operating expenditures required to run the facilities, Drax also makes capital expenditures to upgrade machinery and renovate its facilities. As shown in Table 8, Drax's two facilities in the Cariboo region made approximately \$10.3 million in capital expenditures in 2023, of which 40 percent were from suppliers in the Cariboo region.

Table 8: Summary Capital Expenditures, Cariboo BC, 2023

	In-Region (\$ millions)	Rest of BC (\$ millions)	Outside of BC (\$ millions)	Total (\$ millions)
Total Capital Expenditures	\$4.12	\$4.12	\$2.06	\$10.30

Source: Drax

Table 9 provides the estimated economic impacts generated in BC by Drax's operating and capital expenditures at its two facilities in the Cariboo region. In 2023 the facilities were estimated to have generated approximately:

- \$147 million in total output within the region, including \$78 million in direct output. In addition, \$19 million in indirect and induced impacts was generated in other parts of BC, and \$4 million in other parts of Canada.
- \$50 million in total GDP within the region, including \$16 million in direct GDP. In addition, \$11 million in indirect and induced impacts were generated in other parts of BC, and \$2 million in other parts of Canada.
- Total employment generated within the region of 435 jobs, including 144 direct jobs. In addition, 99 indirect and induced jobs were supported in other parts of BC, and 15 jobs in other parts of Canada.
- \$14 million in total tax revenues generated from spending within the region, including \$5 million in direct total taxes. In addition, \$2 million in indirect and induced taxes were generated from spending in other parts of BC, and \$0.4 million in other parts of Canada.

Municipal Tax Impacts

Drax facilities in the Cariboo region paid over \$400,000 in taxes to their local municipalities. These taxes accounted for approximately **two percent** of the respective **municipal taxes** collected in these communities. These tax contributions support services like waste collection, the fire department, road and infrastructure upgrades, and public parks.

Drax and BC Government, *Municipal Tax Rates and Tax Burden*, Available here:

<https://www2.gov.bc.ca/gov/content/governments/local-governments/facts-framework/statistics/tax-rates-tax-burden>

Table 9: Economic Impacts in Canada of Drax’s Cariboo Facilities, 2023

	Output (\$ millions)	GDP (\$ millions)	Employment (Jobs)	Federal Tax (\$ millions)	Provincial Tax (\$ millions)	Municipal Tax (\$ millions)
Cariboo Region						
Direct	\$78	\$16	144	\$1	\$4	\$0.5
Indirect & Induced	\$69	\$34	291	\$4	\$4	\$1
Total	\$147	\$50	435	\$5	\$8	\$1.5
Rest of BC						
Indirect & Induced	\$19	\$11	99	\$1	\$1	\$0
Rest of Canada						
Indirect & Induced	\$4	\$2	15	\$0.2	\$0.2	\$0.0
Total in Canada						
Direct	\$78	\$16	144	\$1	\$4	\$0.5
Indirect & Induced	\$92	\$47	405	\$5.2	\$5.2	\$1
Total	\$170	\$63	549	\$6.2	\$9.2	\$1.5

Thompson-Okanagan

Drax operates three pellet plants (Armstrong, Princeton and Lavington) in the Thompson-Okanagan region. The Armstrong and Princeton plants are wholly owned and operated by Drax, while the Lavington plant is jointly owned with other partners. As shown in Table 10, these three facilities employed 80 people in 2023 and produced 369,500 MT of pellets.

Table 10: Summary Operating Information, Thompson-Okanagan BC, 2023

Region	Employment (Jobs)	Pellets Produced (MT)
Total	80	369,500

Source: Drax

As shown in Table 11, approximately 47 percent of the overall \$70 million in operating expenditures for Drax’s Thompson-Okanagan facilities was spent at suppliers within the Thompson-Okanagan region and 29 percent was spent at suppliers in other parts of BC. For dried fibre purchases, nearly 60 percent were from suppliers within the region. Dried fibre and rail transportation accounted for approximately 75 percent of the goods and services purchased outside the province. Maintenance related expenses were the next largest expenditure category outside the province (11 percent).

Table 11: Operating Expenditures, Thompson-Okanagan BC, 2023

Category	In-Region (\$ millions)	Rest of BC (\$ millions)	Rest of Canada (\$ millions)	Outside of Canada (\$ millions)	Total (\$ millions)
Dried Fibre	\$20	\$11	\$3	\$1	\$35
Rail	\$0	\$0	\$9	\$0	\$9
Wages and Salaries	\$8	\$0	\$0	\$0	\$8
O&M, External Contractors, Facilities	\$3	\$3	\$1	\$1	\$8
Utilities	\$0	\$2	\$1	\$0	\$3
Trucking	\$0	\$2	\$0	\$0	\$2
Professional services	\$1	\$1	\$0	\$0	\$2
Other	\$1	\$1	\$1	\$0	\$3
Total	\$33	\$20	\$15	\$2	\$70

Source: Drax

Drax's facilities in the Thompson-Okanagan region have **80 local employees** and source nearly **60 percent** of their **dried fibre** from the local region. In addition, **90 percent** of their dried fibre suppliers have a **Sustainable Forest Management** certificate, which indicates fibre is sourced legally and in an environmentally friendly manner.

Source: Drax

In addition to the operating expenditures required to run the facilities, Drax also makes capital expenditures to upgrade machinery and renovate its facilities. As shown in Table 12, Drax's three facilities in the Thompson-Okanagan region made approximately \$4.95 million in capital expenditures in 2023, of which 40 percent were from suppliers in the Thompson-Okanagan region.

Table 12: Summary Capital Expenditures, Thompson-Okanagan BC, 2023

	In-Region (\$ millions)	Rest of BC (\$ millions)	Outside of BC (\$ millions)	Total (\$ millions)
Total Capital Expenditures	\$1.98	\$1.98	\$0.99	\$4.95

Source: Drax

Table 13 provides the estimated economic impacts generated by Drax’s operating and capital expenditures at its three facilities in the Thompson-Okanagan region. In 2023 the facilities were estimated to have generated:

- \$124 million in total output within the region, including \$73 million in direct output. In addition, \$34 million in indirect and induced impacts were generated in other parts of BC, and \$5 million in other parts of Canada.
- \$38 million in total GDP within the region, including \$12 million in direct GDP. In addition, \$17 million in indirect and induced impacts were generated in other parts of BC, and \$2 million in other parts of Canada.
- Total employment generated within the region of 329 jobs, including 113 direct jobs. In addition, 142 indirect and induced jobs were generated in other parts of BC, and 17 jobs in the rest of Canada.
- \$11 million in total tax revenues generated from spending within the region, including \$4 million in direct total taxes. In addition, \$4 million in indirect and induced taxes were generated from spending in other parts of BC, and \$0.6 million in the rest of Canada.

Table 13: Economic Impacts in Canada of Drax’s Thompson-Okanagan Facilities, 2023

	Output (\$ millions)	GDP (\$ millions)	Employment (Jobs)	Federal Tax (\$ millions)	Provincial Tax (\$ millions)	Municipal Tax (\$ millions)
Thompson-Okanagan Region						
Direct	\$73	\$12	113	\$1	\$3	\$0.3
Indirect & Induced	\$51	\$26	216	\$3	\$3	\$1
Total	\$124	\$38	329	\$4	\$6	\$1.3
Rest of BC						
Indirect & Induced	\$34	\$17	142	\$2	\$2	\$0
Rest of Canada						
Indirect & Induced	\$5	\$2	17	\$0.3	\$0.2	\$0.1
Total in Canada						
Direct	\$73	\$12	113	\$1	\$3	\$0.3
Indirect & Induced	\$90	\$45	375	\$5.3	\$5.2	\$1.1
Total	\$163	\$57	488	\$6.3	\$8.2	\$1.4

Municipal Tax Impacts

Drax facilities in the Thompson-Okanagan region paid nearly \$300,000 in taxes to their local municipalities. These taxes accounted for approximately **between one and three percent** of the respective **municipal taxes** in these communities. These tax contributions support services like waste collection, the fire department, road and infrastructure upgrades, and public parks.

Drax and BC Government, Municipal Tax Rates and Tax Burden, Available here:

<https://www2.gov.bc.ca/gov/content/governments/local-governments/facts-framework/statistics/tax-rates-tax-burden>

Total - BC

Total spending on Drax's operations in BC in 2023 was \$302 million (Table 14). This includes its pellet plants, port terminal and two corporate offices. Approximately 80 percent of Drax's spending was at suppliers located in the province, and 20 percent was spent at suppliers outside of the province. Transportation services accounted for approximately half of the goods and services purchased outside of the province. Maintenance related services and administrative services were the next largest purchases outside the province (combined 27 percent).

Table 14: Operating Expenditures, BC, 2023

	Total in BC (\$ millions)	Rest of Canada (\$ millions)	Outside of Canada (\$ millions)	Total (\$ millions)
Dried fibre	\$117	\$3	\$1	\$121
Wages and salaries	\$53	\$0	\$0	\$53
Transportation	\$2	\$33	\$0	\$35
Operations and Maintenance, External Contractors, Facilities	\$27	\$4	\$3	\$34
Professional Services	\$9	\$4	\$1	\$14
Utilities	\$8	\$5	\$0	\$13
Port costs*	\$10	\$0	\$0	\$10
Pellet purchases	\$3	\$0	\$0	\$3
Other	\$9	\$10	\$0	\$19
Total	\$238	\$59	\$5	\$302

Source: Drax

*Port costs are the expenditures related to exporting pellets through the Fibreco terminal at the Port of Vancouver.

In addition to the operating expenditures, Drax made approximately \$31.6 million of capital expenditures in BC in 2023, as shown in Table 15. This includes the capital expenditures at its pellet plants and port terminal and at its corporate offices. Approximately 80 percent of its capital expenditures were for equipment and services from suppliers within BC.

Table 15: Summary Capital Expenditures, BC, 2023

	Total in BC (\$ millions)	Outside of BC (\$ millions)	Total (\$ millions)
Total Capital Expenditures	\$25.28	\$6.32	\$31.60

Source: Drax

Table 16 provides the estimated economic impacts generated by Drax's operating and capital expenditures from its operations in BC. In 2023, its operations in BC were estimated to have generated:

- \$337 million in direct output and \$712 million in total output in BC, as well as \$19 million in indirect and induced output in the rest of Canada.
- \$74 million in direct GDP and \$270 million in total GDP in BC, as well as \$9 million in indirect and induced GDP in the rest of Canada.
- Direct employment of 644 jobs and total employment of 2,330 jobs in BC, as well as 68 indirect and induced jobs in the rest of Canada.
- \$26 million in direct taxes to all levels of government and \$75 million in total taxes to all levels of government, as well as \$2.2 million in indirect and induced tax revenues in the rest of Canada.

Table 16: Economic Impacts in Canada of Drax's BC Operations, 2023

	Output (\$ millions)	GDP (\$ millions)	Employment (Jobs)	Federal Tax (\$ millions)	Provincial Tax (\$ millions)	Municipal Tax (\$ millions)
Total in BC						
Direct	\$337	\$74	644 ⁵	\$4	\$20	\$2
Indirect & Induced	\$375	\$196	1,686	\$22	\$22	\$5
Total	\$712	\$270	2,330	\$26	\$42	\$7
Rest of Canada						
Indirect & Induced	\$19	\$9	68	\$1	\$1	\$0.2
Total in Canada						
Direct	\$337	\$74	644	\$4	\$20	\$2
Indirect & Induced	\$394	\$205	1,754	\$23	\$23	\$5.2
Total	\$731	\$279	2,398	\$27	\$43	\$7.2

⁵ Includes 435 jobs at facilities and corporate operations and 209 jobs related to capital expenditures.

Economic Impacts – Alberta Operations

Drax operates two pellet plants in Alberta (High Level and Entwistle) and has remote corporate employees across the province. The Entwistle plant is wholly owned and operated by Drax, while the High Level plant is jointly owned with other partners. Figure 6 provides the regional locations of Drax’s operations in Alberta.

Figure 6: Drax’s Operations in Alberta



As shown in Table 17, Drax employed 108 individuals across its two plants and remote corporate positions, in Alberta in 2023. The two plants produced 569,000 MT of pellets in 2023.

Table 17: Summary Operating Information, Alberta, 2023

Region	Employment (Jobs)	Pellets Produced (MT)
Total	108	569,000

Source: Drax

As shown in Table 18, approximately 67 percent of the overall \$117 million in operating expenditures for Drax’s Alberta operations was spent at suppliers within the province, and 33 percent was spent at suppliers outside of the province. Transportation services accounted for approximately 69 percent of goods and services purchases outside of the province. Utilities and dried fibre were the next largest purchases outside the province (combined 18 percent).

Table 18: Operating Expenditures, Alberta 2023

Category	Total in Alberta (\$ millions)	Rest of Canada (\$ millions)	Outside of Canada (\$ millions)	Total (\$ millions)
Dried fibre	\$40	\$3	\$0	\$43
Wages and salaries	\$14	\$0	\$0	\$14
Transportation	\$0	\$27	\$0	\$27
O&M, Repair, Facilities	\$10	\$1	\$1	\$12
Professional Services	\$3	\$1	\$0	\$4
Utilities	\$6	\$4	\$0	\$10
Pellet purchases	\$3	\$0	\$0	\$3
Admin & other	\$2	\$2	\$0	\$4
Total	\$78	\$38	\$1	\$117

Source: Drax

In addition to the operating expenditures, Drax made approximately \$11.68 million of capital expenditures in Alberta in 2023, as shown in Table 19. This includes the capital expenditures at its plants, in addition to equipment purchases for its corporate employees. Approximately 80 percent of its capital expenditures were for equipment and services from suppliers within Alberta.

Table 19: Summary Capital Expenditures, Alberta, 2023

	Total in Alberta (\$ millions)	Outside of Alberta (\$ millions)	Total (\$ millions)
Total Capital Expenditures	\$9.34	\$2.34	\$11.68

Source: Drax

Table 20 provides the estimated economic impacts generated by Drax's operating and capital expenditures from operations in Alberta. In 2023, its operations in Alberta were estimated to have generated:

- \$131 million in direct output and \$273 million in total output in Alberta, as well as \$11 million in indirect and induced output in the rest of Canada.
- \$21 million in direct GDP and \$88 million in total GDP in Alberta, as well as \$5 million in indirect and induced GDP in the rest of Canada.
- Direct employment of 151 jobs and total employment of 657 jobs in Alberta, as well as 47 indirect and induced jobs in the rest of Canada.
- \$7 million in direct taxes to all levels of government and \$22 million in total taxes to all levels of government from expenditures in Alberta, as well as \$1.2 million in indirect and induced tax revenues in the rest of Canada.

Table 20: Economic Impacts in Canada of Drax’s Alberta Operations, 2023

	Output (\$ millions)	GDP (\$ millions)	Employment (Jobs)	Federal Tax (\$ millions)	Provincial Tax (\$ millions)	Municipal Tax (\$ millions)
Total in Alberta						
Direct	\$131	\$21	151	\$1	\$5	\$1
Indirect & Induced	\$142	\$67	506	\$8	\$5	\$2
Total	\$273	\$88	657	\$9	\$10	\$3
Rest of Canada						
Indirect & Induced	\$11	\$5	47	\$0.6	\$0.4	\$0.2
Total in Canada						
Direct	\$131	\$21	151	\$1	\$5	\$1
Indirect & Induced	\$152	\$72	553	\$8.6	\$5.4	\$2.2
Total	\$283	\$93	704	\$9.6	\$10.4	\$3.2

Economic Impacts in Canada

Table 21 provides the estimated economic impacts generated in Canada by Drax’s operating and capital expenditures in BC and Alberta. In 2023, its operations in BC and Alberta were estimated to have generated:

- \$1 billion in total output, of which \$712 million was in BC, \$273 million was in Alberta and \$30 million was in the rest of Canada.
- \$372 in total GDP, of which \$270 million was in BC, \$88 million was in Alberta and \$14 million was in the rest of Canada.
- Total employment of 3,101 jobs, of which 2,330 were in BC, 657 were in Alberta and 114 were in the rest of Canada.
- \$100 million in total tax revenues, of which \$75 million were from BC operations, \$22 were from Alberta operations and \$3 million were from spending in the rest of Canada.

Table 21: Economic Impacts in Canada of Drax's Operations, 2023

	Output (\$ millions)	GDP (\$ millions)	Employment (Jobs)	Federal Tax (\$ millions)	Provincial Tax (\$ millions)	Municipal Tax (\$ millions)
BC						
Direct	\$337	\$74	644	\$4	\$20	\$2
Indirect & Induced	\$375	\$196	1,686	\$22	\$22	\$5
Total	\$712	\$270	2,330	\$26	\$42	\$7
Alberta						
Direct	\$131	\$21	151	\$1	\$5	\$1
Indirect & Induced	\$142	\$67	506	\$8	\$5	\$2
Total	\$273	\$88	657	\$9	\$10	\$3
Rest of Canada						
Indirect & Induced	\$30	\$14	114	\$1.6	\$1.3	\$0.4
Total in Canada						
Direct	\$468	\$95	795	\$5	\$25	\$3
Indirect & Induced	\$547	\$277	2,306	\$31.6	\$28.3	\$7.4
Total	\$1,015	\$372	3,101	\$36.6	\$53.3	\$10.4

Drax Suppliers

Drax purchases approximately 75 percent of the goods and services to operate its facilities and corporate offices from suppliers within the respective province of their operations. Of the purchases made from suppliers outside of the province, over 90 percent are from suppliers within Canada.

Source: Drax

Comparisons

Economic Impacts

To provide perspective on the size of the economic impacts generated in BC and Alberta by Drax, it is useful to compare the impacts with those created by other industries. The following are comparisons to other important industries:

- **New Home Construction.** The total employment supported by Drax's operations (3,101 jobs) is approximately equivalent to the employment supported by the construction of 1,447 new homes in Canada.⁶
- **Timber Harvesting.** The total employment supported in BC by Drax's operations (2,330 jobs) is approximately equivalent to 17 percent of employment in the BC forestry, logging and support services sector in 2023 (13,700 jobs).⁷

The direct GDP generated in Alberta by Drax's operations (\$21 million) is approximately equivalent to six percent of the GDP generated by the Alberta forestry and logging sector in 2023 (\$375.4 million).⁸

⁶ Canadian Home Builders' Association. Available here: <https://www.chba.ca/economic-impacts/#:~:text=63%25%20of%20the%20total%20number,and%20help%20increase%20economic%20activity>.

⁷ BC Stats. Available here: <https://www2.gov.bc.ca/gov/content/data/statistics/employment-labour/labour-market-statistics>

⁸ Statistics Canada. Available here: <https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=3610040201>



 **PRAXITY**[™]
Empowering Business Globally



Wherever business takes you

[MNP.ca](https://www.mnp.ca)