

BRIEF TO THE GOVERNMENT OF BC

Draft

(2008-09-08)

A PROPOSAL FOR A PILOT
PROGRAM OF REFORM OF
MUNICIPAL PROPERTY TAXATION
FOR THE BC COAST PULP AND
PAPER INDUSTRY

TOWARDS A SUSTAINABLE MUNICIPAL
PROPERTY TAXATION STRUCTURE

2008

Consumption-Tax Gap in Municipal Services

Volume II – Economic Report

Rob Fitzgerald, Tex Enemark, Norm Stickelmann

TABLE OF CONTENTS

Executive Summary.....	1
Powell River (PR) Division: 2007-2008	2
Port Alberni (PA) Division: 2007-2008	2
Elk Falls Division in Campbell River (CR): 2007-2008	3
Crofton Division in North Cowichan (NC): 2007-2008	3
Catalyst’s Overall BC Operations.....	3
I. Background and Relevant Case Study.....	4
Table 1: Direct Employment at Catalyst Pulp/Paper Mills in BC Coastal Communities.....	4
Table 2: Key Socio-Economic Trends in Prince Rupert since the Skeena Closure	5
II. Community and BC-wide Economic Contribution of Individual Catalyst Mills.....	6
A. Powell River Division.....	6
Table 3: Baseline Socio-economic Data for Powell River	6
Table 4: Estimated Current Contribution of Catalyst Powell River Division to the Powell River and BC Economies	7
B. Port Alberni Division	10
Table 5: Baseline Socio-economic Data for Port Alberni.....	10
Table 6: Estimated Current Contribution of Catalyst Port Alberni Division to the Port Alberni and BC Economies (\$ millions).....	11
C. Elk Falls (Campbell River)	13
Table 7: Baseline Socio-economic Data for Campbell River.....	13
Table 8: Estimated Current Contribution of Catalyst’s Elk Falls Division to the Campbell River and BC Economies	14
D. Crofton (North Cowichan).....	16
Table 9: Baseline Socio-economic Data for North Cowichan.....	17
Table 10: Estimated Current Contribution of Catalyst’s Crofton Mill to the North Cowichan and BC Economies	18
III. Aggregated Contribution of Catalyst’s Operations to the BC Economy	21
Table 11: Estimated Current Contribution of Catalyst’s Overall BC Operations to the Provincial Economy	22

Executive Summary

The purpose of this report is to assess Catalyst Paper's economic contribution to the BC economy and to the communities in which its four BC pulp/paper mills are located. The data for the analysis is based on recent direct employment and sales figures supplied by Catalyst for each of its operations. Economic multipliers at both the provincial level (using results from the provincial government's BC Input-Output Model and local area multipliers generated by BC Stats) are then applied to the direct employment and sales data to estimate the "spin-off" (i.e., indirect and induced) economic impacts from the direct Catalyst economic activities. Total impacts are defined to include the direct, indirect, and induced impacts combined. Other data, mainly from the 2001 and 2006 Census of Canada and from BC Stats, is used to provide socio-economic context for each municipality, in order to give the reader a sense of the economic contribution of each of the four mills to the respective communities in which they are situated.

What is most noteworthy about the results is the size of the economic spin-offs (the indirect and induced) impacts of Catalyst's operations, both in the communities and provincially. For example, according to the BC Input-Output model, each pulp mill job supports an additional 2.3 jobs elsewhere in the BC economy. This is because the nature of these industrial operations is such that not only are they large manufacturing facilities with hundreds of employees each, but a disproportionately large amount of their expenditures are comprised of purchases from other firms, contractors, and suppliers, in addition to the salaries paid to their employees.

Compounding this effect is the fact that average salaries paid by the pulp/paper sector are much higher than the annual earnings of the average British Columbian, hence the re-spending effects are also greater. For example, the average pre-tax annual salary of all of Catalyst's BC employees is \$ 68,000 (\$ 109,000 if benefits are included); this compares favourably to the annual average wage for full-time workers in BC of \$ 38,300 as of July 2008.¹

¹ Based on 1,800 hours worked per year and an average hourly wage of \$21.26 as per *BC Earnings and Employment Trends*, BC Stats: July 2008.

The key findings regarding Catalyst's contribution to each community and to the provincial economy overall are summarized on the following page. Note that the employment and personal income estimates for the municipalities are conservative since the estimates only include those workers judged by Catalyst to be residing within the boundaries of each municipality. (Total direct employment at three of the mills is much larger: 305 in Port Alberni, 856 in Campbell River, and 833 in North Cowichan).

Powell River (PR) Division: 2007-2008

- **Employment:** 502 direct PR jobs; 929 total PR jobs; 1,668 total jobs BC-wide
- **Personal Income:** \$27 million direct PR; \$37 million total PR; \$56 million BC-wide
- **Gross Domestic Product:** \$64 million direct; \$238 million total BC-wide
- **Estimated Federal/Provincial Taxes:** \$20 million direct; \$51 million total BC-wide
- **2008 Property Taxes to Powell River Municipality:** \$4.6 million (38% of total collected)
- **Economic Significance to Powell River:** 17% of local jobs & 17% of local income

Port Alberni (PA) Division: 2007-2008

- **Employment:** 183 direct PA jobs; 307 total PA jobs; 994 total jobs BC-wide
- **Personal Income:** \$9 million direct PA \$13 million total PA; \$35 million BC-wide
- **Gross Domestic Product:** \$48 million direct; \$179 million total BC-wide
- **Estimated Federal/Provincial Taxes:** \$15 million direct; \$39 million total BC-wide
- **2008 Property Taxes to Pt. Alberni Municipality:** \$5.2 million (29% of total collected)
- **Economic Significance to Pt. Alberni:** 4% of local jobs & 5% of local income

Elk Falls Division in Campbell River (CR): 2007-2008

- **Employment:** 599 direct CR jobs; 1,126 total CR jobs; 2,790 total jobs BC-wide
- **Personal Income:** \$32 million direct CR; \$45 million total CR; \$92 million BC-wide
- **Gross Domestic Product:** \$93 million direct; \$344 million total BC-wide
- **Estimated Federal/Provincial Taxes:** \$30 million direct; \$74 million total BC-wide
- **2008 Property Taxes to CR Municipality:** \$5.8 million (29% of the total collected)
- **Economic Significance to Campbell River:** 8% of local jobs & 8% of local income

Crofton Division in North Cowichan (NC): 2007-2008

- **Employment:** 666 direct NC jobs; 1,118 total NC jobs; 2,715 total jobs BC-wide
- **Personal Income:** \$36 million direct NC; \$48 million total NC; \$96 million BC-wide
- **Gross Domestic Product:** \$103 million direct; \$386 million total BC-wide
- **Estimated Federal/Provincial Taxes:** \$33 million direct; \$83 million total BC-wide
- **2008 Property Taxes to NC Municipality:** \$6.7 million (35% of the total collected)
- **Economic Significance to N. Cowichan:** 9% of local jobs & 9% of local income

Catalyst's Overall BC Operations

In addition to the 2506 employees at Catalyst's four BC mills, another 398 are employed at its ancillary operations in the Lower Mainland and Nanaimo, including at its office in Richmond. Its gross sales in 2007 were \$1.7 billion. Inclusive of all of its BC operations, Catalyst's economic contribution to the province is estimated to be as follows:

- **Employment:** 2,904 direct jobs and 9,460 total jobs
- **Personal Income:** \$156 million in direct after tax income and \$323 million BC-wide
- **Gross Domestic Product:** \$309 million direct and \$1,149 million BC-wide
- **Estimated Federal/Provincial Taxes:** \$97 million direct and \$247 million total
- **Property Taxes:** \$32.3 million paid overall in 2007, including to the four municipalities, as well as to other authorities; \$22.3 million billed solely by the four municipalities in 2008.

I. Background and Relevant Case Study

Catalyst Inc. owns and operates four pulp/paper mills on the BC coast. Table 1 lists these mills and other data relating to the communities in which they are located.

Table 1: Direct Employment at Catalyst Pulp/Paper Mills in BC Coastal Communities

Mill & Municipality where Located	Direct Mill Jobs 2008	Total Municipal Employment (2006)	Total Municipal Population (2006)
Powell River Division (Paper) – Powell River	512	5,480	12, 983
Port Alberni Division (Paper) – Port Alberni	305	7,485	17,548
Elk Falls (Pulp/Paper) – Campbell River	856	14,235	29,572
Crofton Division (Pulp/Paper) – North Cowichan	833	12,875	27,557

Sources: 2006 Census of Canada; Catalyst Paper Corp.

These mills are all large private sector employers and contributors of property taxes in each of their respective communities. Furthermore, in relation to the size of these communities, the contribution of each mill to the local economy is significant. Should any cease operations, the negative socio-economic impacts would be far-reaching, since the jobs are high-paying.

According to data from Catalyst, the total wage/benefit package for management/technical employees at the four mills is \$ 148,094/yr. and for union employees is \$ 99,873/yr.

Using a case study to illustrate the economic significance of a similar mill to a resource-based community comparable to those where the Catalyst mills are located, consider the situation in Prince Rupert as per Table 2. In June 2001, the Skeena Cellulose pulp mill closed, with a loss of 750 high-paying jobs.² Table 2 shows a comparison of key indicators, taken from the Census of

²Source: *A Socio-Economic Impact Analysis of Skeena-Cellulose Inc.*, Prince Rupert Economic Development Commission., July 2002.

Canada in both 2001 and 2006, to illustrate economic trends in that community since the closure.

Table 2: Key Socio-Economic Trends in Prince Rupert since the Skeena Closure

Census Socio-economic Indicator	2001 Value	2006 Value	% change
Population	14,643	12,815	-12.5%
Total Employment (# of individuals working)	6,890	6,055	-12.2%
Median Census Family Income (\$)	\$60,536	\$56,271	-7%
Govt. Transfers as a % of Total Income	12.3%	15.4%	+25%
After Tax Income - Trading Area (\$ millions)	\$284	\$276	-3%
After Tax Income – Municipality (\$ millions)	n/a	\$208	-
Avg. Value of Owner-Occupied Dwellings (\$)	\$121,066	\$164,644	+36%

Sources: BC Stats: 2001 Census Profile for BC’s Regions; Statistics Canada: 2006 Community Profiles;

BC Stats: BC Taxation Statistics 2001 & 2005. Municipal After Tax Income from BC Stats using Census Data

There would have been other intervening economic impacts that affected Prince Rupert, both positive and negative (e.g., growing port and cruise ship activity, declining commercial fisheries, a turbulent regional forestry economy, etc.). However, it seems clear that the closure of the Skeena mill directly contributed to Prince Rupert’s economic downturn from 2001-2006. Even excluding the “spin-off” jobs that can be attributed the pulp mill, the 750 direct jobs at Skeena represented 11% of all the 6890 jobs in Prince Rupert as of mid-2001, and therefore it is not difficult to explain the direction and magnitude of the trends demonstrated in Table 2. And while housing prices increased by 36% (mainly due factors such as lower interest rates and the BC housing “boom”), the data presented in the following sections demonstrates that they increased far more in Powell River, Port Alberni, Campbell River, and North Cowichan.

It could be argued that another relevant case study is the closing of the Woodfibre pulp mill near Squamish in 2006. Based on the media reports of the day, 323 workers were employed at Woodfibre prior to its closing. However, the impact on the community (2006 population of 14,949) does not appear to have been significant in this case, given the high tourism and service

sector related growth in the area driven by the Whistler corridor. For example, the population of the Squamish Forest District (the Ministry of Forests administrative unit covering the area around Squamish, which would likely capture the residences of most of the workers) doubled to almost 30,000 during the 1981-2001 time period, vs. 44% growth for BC overall. It is also likely that some workers lived outside of the Squamish municipality.

II. Community and BC-wide Economic Contribution of Individual Catalyst Mills

A. Powell River Division

Table 3 below contains key 2001 and 2006 socio-economic data for the District of Powell River as it relates to Catalyst’s Powell River Division, in order to provide both a 2006 “snapshot” as well as a baseline time trend for that community’s economy.

Table 3: Baseline Socio-economic Data for Powell River

Census Socio-economic Indicator	2001 Value	2006 Value	% change
Population	12,957	12,983	+0.2%
Total Employment (# of individuals working)	5,460	5,480	+0.4%
Unemployment Rate	8%	7%	-12.5%
Median Census Family Income (\$)	\$53,946	\$59,151	+9.6%
After Tax Income – Trading Area (\$ millions)	\$286	\$332	+16.1%
After Tax Income – Municipality (\$ millions)	n/a	\$219	-
Avg. Value of Owner-Occupied Dwellings (\$)	\$130,346	\$245,383	+88%

Sources: BC Stats: 2001 Census Profile for BC’s Regions; Statistics Canada: 2006 Community Profiles; BC Stats: BC Taxation Statistics 2001 & 2005; Municipal After Tax Income from BC Stats using Census Data

The data indicates that the economic situation in Powell River improved somewhat between 2001 and 2006. Some of this data also provides benchmarks, e.g., total 2006 Powell River employment and after tax income, to assess the economic significance of Catalyst’s Powell

River Division to both the community and to the province. Table 4 contains the data/analysis that describes those contributions.

Table 4: Estimated Current Contribution of Catalyst Powell River Division to the Powell River and BC Economies

Economic Contribution (2007-08)	Direct	Indirect	Induced	Total
Powell River Employment (# Jobs)	502	301	126	929
Powell River After Tax Income (\$ millions)	27	8	2	37
Provincial Employment (# Jobs)	512	880	276	1668
Provincial After Tax Income (\$ millions)	28	24	4	56
Provincial Economic Output (\$ millions)	356	363	57	776
Provincial Gross Domestic Product (\$ millions)	64	142	32	238
Federal Taxes (\$ millions)	8	12	4	24
Provincial Taxes (\$ millions)	12	10	5	27
2008 Property Taxes Paid to Powell R. (\$ millions)	4.6	-	-	4.6

Each of the economic indicators contained in Table 4 is explained below:

- Local Employment:** Catalyst estimates that 502 of the 512 total workforce at the Powell River Division live in the community. In addition to these direct jobs, more local jobs are created through spending by the company on locally produced goods/services (“indirect” employment) and the re-spending of the incomes of the direct/indirect workforce creates further “induced” employment. *In total, the estimated contribution is 929 local jobs, equivalent to 17% of the 5480 workers employed in Powell River as of 2006.*³

³ Source of local employment multipliers – BC Stats: *2001 Economic Dependencies and Impact Ratios for 63 Local Areas*, January 2004. The indirect multiplier for Powell River is 0.6 and the induced multiplier (assuming social safety net, which is more realistic) is 0.25.

- Local After Tax Personal Income:** Based upon Catalyst payroll data indicating an average after-tax income of \$54,000/yr.,⁴ direct employees living in the community earn an estimated \$27 million annually. Further, using an average after tax indirect and induced worker salaries of \$26,700 and \$19,000 per year⁵ and the local indirect/induced employment estimated, the total after tax personal income generated by the Division in the community is \$37 million/yr. *This amount represents 17% of the \$219 million in 2005 (latest year available) after tax income of Powell River.*
- Total BC Employment and After Tax Income:** In addition to the local direct, indirect, and induced jobs created by the Division in the community, other jobs and personal incomes are created in other parts of BC due to spending on goods/services produced elsewhere; as well, some direct workers live outside of the community. *Including all of the direct, indirect and induced employment as estimated using BC Input-Output Model⁶ (BCIOM), there are a total of 1,668 BC jobs and \$56 million in BC personal after tax income in 2008 (including the local jobs and incomes) due to the existence of the Powell River Division. This implies that each Catalyst direct job in Powell River creates about 2.3 additional jobs elsewhere in the BC economy.*
- Provincial Economic Output:** This is roughly equivalent to gross sales revenues. In 2007, revenues for the Powell River Division were \$356 million. Using multipliers for the pulp/paper industry taken from the BCIOM, further indirect sales revenues are generated by those supplying goods/services to the Division and by those businesses that rely on the re-spending of wages by the direct and indirect activity generated.

⁴ Using a weighted average based on ratios of one employee group to the other, along with data on deductions from Catalyst and Canada/BC income tax rates and CPP/El deductions (based on a single earner family of four), the total wage/benefit package for management/technical employees of \$148,094/yr. and \$99,873/yr. for union employees equates to \$67,829/yr. of pre-tax income (excluding benefits) on average for all employees and \$53,575/yr. in terms of after tax (and excluding benefits) disposable income.

⁵Source of average indirect and induced salaries – BC Stats: *2001 Economic Dependency Table for Forest Districts*, pages 13, 36, and 38.

⁶ Source of BCIOM multipliers for Pulp Mills (NAICS #32211) - BC Stats, Ministry of Labour and Citizen's Services: *BC Economic Multipliers and How to Use Them*, April 2007, p. 36 supplemented by more specific information provided by BC Stats staff. The provincial multipliers used for each million dollars of direct pulp mill revenues are as follows – Economic Output: 1.02 indirect and 0.16 induced; GDP: 0.18 direct, 0.40 indirect, and 0.09 induced; Total BC Employment: 1.72 indirect and 0.54 induced; Federal Taxes: 0.028 direct, 0.034 indirect, and 0.025 induced ; Provincial Taxes: 0.035 direct, 0.028 indirect, and 0.026 induced.

*Including these effects, total output created by the Powell River Division is estimated to be **\$776 million** in 2007.*

- **Provincial Gross Domestic Product:** This economic indicator, known as “GDP,” takes economic output and nets out the revenues earned by intermediate goods/suppliers in order to arrive at the true “value added” of the economic activity. The GDP created by the indirect and induced economic activity is also estimated using BCIOM multipliers. *In total, the amount of provincial GDP created by the Powell River Division in 2007 is estimated to be **\$238 million**.*
- **Federal and Provincial Taxes Paid:** Since the sales revenues of the Division are known, the amount of taxes paid to the federal government can be estimated using the BCIOM. The tax parameters that are included in the model account for personal income taxes, corporate income taxes, as well as indirect taxes (e.g., sales taxes). *Based on 2007 sales revenues of the Powell River Division, total federal taxes paid arising from direct, indirect, and induced economic activities are estimated to be **\$24 million** annually and provincial taxes paid amount to about **\$27 million** per year.*
- **Local Property Taxes:** According to Catalyst’s *Property Tax Notice*, the Powell River Division was billed **\$4.6 million** in property taxes in 2008, representing 77% of this mill’s total property taxes. *Assuming that total 2008 revenues of the City of Powell River will be roughly equivalent to what they were in 2006 (latest available data), \$4.6 million is 38% of the \$12 million in total taxes collected for municipal purposes by the City and 21% of its \$22.4 million in total operating revenues collected.*⁷

⁷ Source for 2006 revenue data is *City of Powell River 2007 Annual Report*, p. 25; see www.powellriver.ca.

B. Port Alberni Division

Table 5 below contains key 2001 and 2006 socio-economic data for the municipality of Port Alberni as it relates to Catalyst's Port Alberni Division, in order to provide both a 2006 "snapshot" as well a baseline time trend for that community's economy.

Table 5: Baseline Socio-economic Data for Port Alberni

Census Socio-economic Indicator	2001 Value	2006 Value	% change
Population	17,743	17,548	-1%
Total Employment (# of individuals working)	6,840	7,485	+9.4%
Unemployment Rate	15.1%	7.7%	-49%
Median Census Family Income (\$)	\$48,748	\$53,729	+10.2%
After Tax Income – Trading Area (\$ millions)	\$390	\$461	+18.2%
After Tax Income – Municipality (\$ millions)	n/a	\$273	-
Avg. Value of Owner-Occupied Dwellings (\$)	127,810	235,868	+85%

Sources: BC Stats: 2001 Census Profile for BC's Regions; Statistics Canada: 2006 Community Profiles; BC Stats: BC Taxation Statistics 2001 & 2005; Municipal After Tax Income from BC Stats using Census Data

With the exception of the reduction in population, the data indicate that the economic situation in Port Alberni improved significantly between 2001 and 2006. Some of this data also provides benchmarks, e.g., total 2006 Port Alberni employment and after tax income, to assess the economic significance of Catalyst's Port Alberni Division to both the community and to the province. Table 6 contains the data/analysis that describes those contributions.

Table 6: Estimated Current Contribution of Catalyst Port Alberni Division to the Port Alberni and BC Economies (\$ millions)

Economic Contribution (2007-08)	Direct	Indirect	Induced	Total
Port Alberni Employment (# Jobs)	183	90	34	307
Port Alberni After Tax Income (\$ millions)	9	3	1	13
Provincial Employment (# Jobs)	305	524	164	994
Provincial After Tax Income (\$ millions)	16	15	4	35
Provincial Economic Output (\$ millions)	268	273	42	584
Provincial Gross Domestic Product (\$ millions)	48	107	24	179
Federal Taxes (\$ millions)	6	9	3	18
Provincial Taxes (\$ millions)	9	8	4	21
2008 Property Taxes Paid to Pt. Alberni (\$ millions)	5.2	-	-	5.2

Each of the economic indicators contained in Table 6 is explained below:

- **Local Employment:** Catalyst estimates that 183 of the 305 total workforce at the Port Alberni Division live in the municipality, with the remainder living in other communities such as Nanaimo, Parksville, etc. In addition to these direct jobs, more local jobs are created through spending by the company on locally produced goods/services (“indirect” employment) and the re-spending of the incomes of the direct/indirect workforce creates further “induced” employment. *In total, the estimated contribution is **307 local jobs**, equivalent to 4% of the 7485 workers employed in Port Alberni as of 2006.*⁸
- **Local After Tax Personal Income:** Based upon Catalyst payroll data indicating an after-tax wage of \$54,000/yr.,⁹ direct employees living in the community earn an estimated \$9 million annually. Further, using an average after tax indirect and induced worker

⁸ Source of local employment multipliers – BC Stats: *2001 Economic Dependencies and Impact Ratios for 63 Local Areas*, January 2004. The indirect multiplier for Port Alberni is 0.49 and the induced multiplier (assuming social safety net, which is more realistic) is 0.19.

⁹ See Footnote #4.

salaries of \$ 28,300 and \$ 22,000 per year¹⁰ and the local indirect/induced employment estimated, the total after tax personal income generated in the community is \$ 13 million/yr. *This amount represents 5% of the \$273 million in 2005 after tax income of Port Alberni.*

- **Total Provincial Employment and After Tax Income:** Supplementing the local jobs created in the community, other jobs and incomes are created in BC due to spending on goods/services produced elsewhere and some direct workers live outside of the community. *Including all of the direct, indirect and induced employment as estimated using BC Input-Output Model¹¹ (BCIOM) multipliers, there are 994 BC jobs and \$35 million in BC after tax income as of 2008 (including the local jobs) due to the mill, or 2.3 additional jobs elsewhere in the BC economy for each Catalyst direct job in Port Alberni.*
- **Provincial Economic Output:** This is roughly equivalent to gross sales revenues. In 2007, revenues for the Port Alberni Division were \$ 268 million. Using the BCIOM, further indirect sales revenues are generated by those supplying goods/services to the mill and by those businesses that rely on the re-spending of wages by the direct and indirect employees. *Including these effects, total economic output created by the Port Alberni Division is estimated to be \$584 million in 2007.*
- **Provincial Gross Domestic Product:** “GDP” takes economic output and nets out the revenues earned by intermediate goods/suppliers in order to arrive at the true “value added” of the economic activity. The GDP created by the indirect and induced economic activity is also estimated using BCIOM multipliers. *In total, the amount of provincial GDP created by the Port Alberni Division in 2007 is estimated at \$179 million.*
- **Federal and Provincial Taxes Paid:** Since the sales revenues of the Division are known, the amount of taxes paid to governments can be estimated using the BCIOM, which accounts for personal income taxes, corporate income taxes, as well as indirect taxes (e.g., sales taxes). *Based on 2007 sales revenues of the Port Alberni Division, total federal taxes paid arising from direct, indirect, and induced economic activities are estimated at \$18 million in federal revenues and \$21 million in provincial revenues.*

¹⁰ Source of average indirect and induced salaries – see Footnote #5.

¹¹ Source of BCIOM multipliers for Pulp Mills (NAICS #32211) – see Footnote #6.

- Local Property Taxes:** According to Catalyst’s *Property Tax Notice*, the Port Alberni Division was billed **\$5.2 million** in property taxes in 2008, representing 83% of this mill’s overall property taxes. *Assuming that total 2008 revenues of the City of Port Alberni will be roughly equivalent to what they were in 2007, \$5.2 million is 29% of the \$18 million in total taxes collected for municipal purposes by the City and 20% of its \$26.1 million in total operating revenues collected.*¹²

C. Elk Falls (Campbell River)

Table 7 below contains key 2001 and 2006 socio-economic data for the municipality of Campbell River as it relates to Catalyst’s Elk Falls pulp/paper mill, in order to provide both a 2006 “snapshot” as well a baseline time trend for that community’s economy.

Table 7: Baseline Socio-economic Data for Campbell River

Census Socio-economic Indicator	2001 Value	2006 Value	% change
Population	28,276	29,572	+4.6%
Total Employment (# of individuals working)	13,070	14,235	+8.9%%
Unemployment Rate	12.7%	8.9%	-30%
Median Census Family Income (\$)	\$54,289	\$62,665	+15.4%
After Tax Income – Trading Area (\$ millions)	\$570	\$700	+23%
After Tax Income – Municipality (\$ millions)	n/a	\$525	-
Avg. Value of Owner-Occupied Dwellings (\$)	141,911	273,482	+93%

Sources: BC Stats: 2001 Census Profile for BC’s Regions; Statistics Canada: 2006 Community Profiles; BC Stats: BC Taxation Statistics 2001 & 2005; Municipal After Tax Income from BC Stats using Census Data

The data show that the economic situation in Campbell River improved significantly between 2001 and 2006, consistent with the improving economic situation in most BC communities over that period. Some of this data also provides benchmarks to assess the economic significance of Catalyst’s Elk Falls operation to the community and to the

¹² Source for 2007 revenue data is *City of Port Alberni 2007 Comprehensive Annual Financial Report*, p. 35; see www.city.port-alberni.bc.ca.

province. Table 8 contains the estimates that describes the economic impact of the Elk Falls mill, but does not adjust for the July 2008 announcement of a pending production curtailment at Elk Falls.

**Table 8: Estimated Current Contribution of Catalyst’s Elk Falls Division t
to the Campbell River and BC Economies**

Economic Contribution (2007-08)	Direct	Indirect	Induced	Total
Campbell River Employment (# Jobs)	599	383	144	1126
Campbell River After Tax Income (\$ millions)	32	10	3	45
Provincial Employment (# Jobs)	856	1,472	462	2,790
Provincial After Tax Income (\$ millions)	46	37	9	92
Provincial Economic Output (\$ millions)	514	524	82	1,120
Provincial Gross Domestic Product (\$ millions)	93	206	46	344
Federal Taxes (\$ millions)	12	17	6	35
Provincial Taxes (\$ millions)	18	14	7	39
2008 Property Taxes Paid to Campbell R. (\$ millions)	5.8	-	-	5.8

Each of the economic indicators contained in Table 6 is explained below:

- Local Employment:** Catalyst estimates that 599 of the 856 total workforce at Elk Falls live in the municipality, with most of the remainder living in areas such as Courtenay, Comox, and north of Campbell River. In addition to these direct jobs, more local jobs are created through spending by the company on locally produced goods/services (“indirect” employment) and the re-spending of the incomes of the direct/indirect workforce creates further “induced” employment. *In total, the estimated contribution*

is **1,126 local jobs**, equivalent to **8%** of the 14,235 workers employed in Campbell River as of 2006.¹³

- **Local After Tax Personal Income:** Using Catalyst payroll data of an after-tax wage of \$54,000/yr.,¹⁴ direct employees earn an estimated \$32 million annually. Further, using an average after tax indirect and induced worker salaries of \$25,300 and \$19,400 per year¹⁵ and the local indirect/induced employment estimated, the total after tax personal income generated by the Division in the community is \$45 million/yr. *This amount represents 8% of the \$525 million in 2005 after tax income of Campbell River.*
- **Total Provincial Employment and After Tax Income:** In addition to the local direct and spin-off jobs created by Elk Falls in the community, other jobs are created in other areas due to spending on goods/services produced elsewhere; as well, some direct workers live outside of the community. *Including all of the direct and “spin-off” employment as estimated using the BC Stats BC Input-Output Model (BCIOM),¹⁶ there are a total of **2,790 BC jobs and \$92 million** in personal after tax income in 2008 (including the local jobs) due to the existence of the Port Alberni Division. This implies that each Catalyst direct job at Elk Falls creates about 2.3 additional jobs elsewhere in the BC economy.*
- **Provincial Economic Output:** This is roughly equivalent to gross sales revenues. In 2007, revenues for the Elk Falls were \$514 million. Using BCIOM output multipliers for the pulp/paper industry, further indirect sales revenues are generated by those supplying goods/services to the Division and by those businesses that rely on the re-spending of wages by the direct and indirect workers employed. *Including these multiplier effects, total economic output created by the Elk Falls is estimated to be **\$1,120 million** in 2007.*
- **Provincial Gross Domestic Product:** This economic indicator, known as “GDP,” takes economic output and nets out the revenues earned by intermediate goods/suppliers in order to arrive at the true “value added” of the activity. The GDP created by the indirect

¹³ Source of local employment multipliers – BC Stats: *2001 Economic Dependencies and Impact Ratios for 63 Local Areas*, January 2004. The indirect multiplier for the Campbell River area is 0.64 and the induced multiplier (assuming social safety net, which is more realistic) is 0.24.

¹⁴ See Footnote #4.

¹⁵ Source of average indirect and induced salaries – see Footnote #5.

¹⁶ Source of BCIOM multipliers for Pulp Mills (NAICS #32211) – see Footnote #6.

and induced economic activity is also estimated using BCIOM multipliers. *In total, the amount of provincial GDP created by Elk Falls in 2007 is estimated to be **\$344 million**.*

- **Federal and Provincial Taxes Paid:** Since Elk sales revenues are known, the amount of taxes paid to governments can also be estimated using the BCIOM. The tax parameters that are included in the model account for personal income taxes, corporate income taxes, as well as indirect taxes (e.g., sales taxes). *Based on its 2007 sales revenues, total federal taxes paid arising from direct, indirect, and induced economic activities are estimated at **\$35 million** in federal revenues and provincial revenues amount to **\$39 million** per year.*
- **Local Property Taxes:** According to Catalyst's Property Tax Notice, the Elk Falls Division paid **\$5.8 million** in property taxes in 2008. This amount represents 68% of this mill's total property taxes paid in 2008. *Assuming that total 2008 revenues of the City of Campbell River will be roughly equivalent to what they were in 2007, \$5.8 million is 29% of the \$20.2 million in total taxes collected for municipal purposes by the City and 14% of its \$41.2 million in total operating revenues collected.*¹⁷

D. Crofton (North Cowichan)

Table 9 below contains key 2001 and 2006 socio-economic data for the municipality of North Cowichan, where Catalyst's Crofton mill is located, in order to provide both a 2006 "snapshot" as well a baseline time trend for that community's economy.

¹⁷ Source for 2007 revenue data is *City of Campbell River 2007 Annual Report and Financial Statements*, pp. 53 & 64. See www.campbellriver.ca.

Table 9: Baseline Socio-economic Data for North Cowichan

Census Socio-economic Indicator	2001 Value	2006 Value	% change
Population	26,148	27,557	+5.4%
Total Employment	11,575	12,875	+11.2%
Unemployment Rate	9.4%	5.7%	-39%
Median Census Family Income	\$52,762	\$60,402	+14.5%
After Tax Income* - Trading Area (\$ millions)	\$504	\$633	+26%
After Tax Income – Municipality (\$ millions)	n/a	\$506	-
Avg. Value of Owner-Occupied Dwelling	179,412	332,735	+86%

* Due to lack of on after-tax income for the North Cowichan area, this was estimated by pro-rating to Campbell River after-tax income, using the ratio of North Cowichan employment to Campbell River employment.

Sources: BC Stats: 2001 Census Profile for BC's Regions; Statistics Canada: 2006 Community Profiles; BC Stats: BC Taxation Statistics 2001 & 2005; Municipal After Tax Income from BC Stats using Census Data

The data show that the economic situation has improved significantly between 2001 and 2006, consistent with the improving economic situation in most BC communities over that period. Some of this data also provides benchmarks to assess the economic significance of Catalyst's Crofton operation to both the community and to the province. Table 10 contains the data/analysis that describes those contributions.

**Table 10: Estimated Current Contribution of Catalyst's Crofton Mill
to the North Cowichan and BC Economies**

Economic Contribution (2007-08)	Direct	Indirect	Induced	Total
N. Cowichan Employment (# Jobs)	666	326	126	1,118
N. Cowichan After Tax Income (\$ millions)	36	9	3	48
Provincial Employment (# Jobs)	833	1432	450	2,715
Provincial After Tax Income (\$ millions)	45	41	10	96
Provincial Economic Output (\$ millions)	577	589	92	1,258
Provincial Gross Domestic Product (\$ millions)	103	230	52	386
Federal Taxes (\$ millions)	13	19	7	39
Provincial Taxes (\$ millions)	20	16	8	44
2008 Local Govt. Property Taxes (\$ M)	6.7	-	-	6.7

Each of the economic indicators contained in Table 10 is explained below:

- Local Employment:** It is estimated that about 80% or 666 of the 833 total workforce at Crofton live in the municipality, with most of the remainder living in Duncan, Ladysmith, Victoria, etc. In addition to these direct jobs, more local jobs are created through spending by the company on locally produced goods/services (“indirect” employment) and the re-spending of the incomes of the direct/indirect workforce creates further “induced” employment. *In total, the estimated contribution is **1,118 local jobs**, equivalent to **9%** of the 12,875 workers employed in North Cowichan as of 2006.*¹⁸
- Local After Tax Personal Income:** Based upon Catalyst payroll data indicating an after-tax wage of \$54,000/yr.,¹⁹ direct employees living in the community earn an estimated \$36 million annually. *Further, using an average after tax indirect and induced worker*

¹⁸ Source of local employment multipliers – BC Stats: *2001 Economic Dependencies and Impact Ratios for 63 Local Areas*, January 2004. The indirect multiplier for the Campbell River area is 0.64 and the induced multiplier (assuming social safety net, which is more realistic) is 0.24.

¹⁹ See Footnote #4.

salaries of \$25,300 and \$19,400 per year²⁰ and the local indirect/induced employment estimated, the total after tax personal income generated by Crofton jobs in the community is **\$48 million/yr.** or **9%** of the \$508 million in after-tax income of North Cowichan.

- **Total Provincial Employment and After Tax Income:** In addition to the local direct and spin-off jobs generated in the community, spending on “outside” goods/services creates other jobs elsewhere in BC; as well, some direct workers live outside of the community. *Including all of the direct, indirect and induced employment as estimated using the BC Stats British Columbia Input-Output Model²¹ (BCIOM), there are a total of **2,715 BC jobs** and \$96 million in personal after income created in 2008 (including the local jobs) due to the existence of the Crofton mill. This implies that each Catalyst direct job at Crofton creates about 2.3 additional jobs elsewhere in the BC economy.*
- **Provincial Economic Output:** This is roughly equivalent to gross sales revenues. In 2007, revenues for the Crofton mill were \$514 million. Using BCIOM output multipliers for the pulp/paper industry, further indirect sales revenues are generated by those supplying goods/services to the mill and by those businesses relying on the re-spending of wages by the direct/indirect workers employed. *Including these multiplier effects, total economic output created by the Crofton mill is estimated to be **\$1,257 million** in 2007.*
- **Provincial Gross Domestic Product:** This economic indicator, known as “GDP,” takes economic output and nets out the revenues earned by intermediate goods/suppliers in order to arrive at the true “value added” of the activity. The GDP created by the indirect and induced economic activity is also estimated using BCIOM multipliers. *In total, the amount of provincial GDP created by Crofton in 2007 is estimated to be **\$386 million**.*
- **Federal and Provincial Taxes Paid:** The amount of taxes paid to governments can also be estimated using Crofton’s sales revenues and the BCIOM. The tax parameters that are included in the model account for personal income taxes, corporate income taxes, as well as indirect taxes (e.g., sales taxes). *Based on its 2007 sales revenues, total federal taxes paid arising from direct, indirect, and induced economic activities are*

²⁰ Source of average indirect and induced salaries – see Footnote #5.

²¹ Source of BCIOM multipliers for Pulp Mills (NAICS #32211) – see Footnote #6.

estimated at **\$39 million** in federal revenues and provincial revenues amount to **\$44 million** per year.

- **Local Property Taxes:** According to Catalyst's *Property Tax Notice*, the Crofton mill paid **\$6.7 million** in property taxes in 2008, representing 79% of this mill's total property taxes in 2008. Assuming that total 2008 revenues of the District of North Cowichan will be roughly equivalent to what they were in 2007, \$6.7 million is 35% of the \$19.1 million in total taxes collected for municipal purposes by the City and 22% of its \$29.9 million in total operating revenues collected.²²

²² Source for 2007 revenue data is *The Corporation of the District of North Cowichan Annual Municipal Report and Financial Statements for 2007*, p. 14. See www.northcowichan.bc.ca.

III. Aggregated Contribution of Catalyst's Operations to the BC Economy

In addition to the mills in the four communities, Catalyst has employees in other operations in BC, including in head offices and a paper recycling operation in the Lower Mainland. The breakdown of employment for the additional enterprises as of May 2008 is as shown below:

Richmond Office:	166
Surrey Distribution:	103
Nanaimo:	59
Paper Supply:	53
Fibre Supply:	<u>15</u>
Total	398

Taking this employment into account and totaling the amounts for the other economic indicators from the previous sections of this document, the overall economic contribution of Catalyst's operations to the BC economy are summarized in Table 11.

Table 11: Estimated Current Contribution of Catalyst’s Overall BC Operations to the Provincial Economy

Economic Contribution (2007-08)	Direct	Indirect	Induced	Total
Total BC Employment (# Jobs)	2,902	4,991	1,567	9,460
Total BC After Tax Income (\$ M)	156	135	32	323
Total BC Economic Output (\$ M)	1,715	1,749	275	3,739
Total BC Gross Domestic Product (\$ M)	309	686	154	1,149
Total Federal Taxes (\$ M)	39	57	21	117
Total Provincial Taxes (\$ M)	58	48	24	130
2007 Local Govt. Property Taxes (\$ M)	32	-	-	32

Each of the economic indicators contained in Table 11 is explained below:

- Total BC Employment:** This indicator shows the total direct, indirect, and induced employment generated by the four Catalyst mills in BC plus employment in Nanaimo and Lower Mainland (paper recycling, fibre supply, head office, etc.). In terms of the direct employment, the four mills combined accounted for 2,506 (mainly full-time) workers as of May 2008 and head office, paper recycling, etc. operations (mainly in the Lower Mainland) jobs totaled 396, for an overall direct employment level of 2,902. It is noteworthy that according to the BC Input-Output Model multipliers used for the pulp operations, indirect employment actually exceeds direct employment. This is because such a significant amount of the expenditures by these type of operations involve Catalyst’s non-wage purchases of goods and services produced by British Columbians, including the use of contractors for certain labour activities.

While induced employment may appear to be small relative to direct/indirect employment, this is because the smaller, more conservative “no safety net” multiplier is used, as it was for all the previous sections. This multiplier assumes that individuals directly/indirectly employed by Catalyst have alternative (but likely lower) income

sources if their Catalyst jobs ceased to exist, which is more realistic than assuming (especially in the current full employment environment in BC) that all of those who may cease working directly or indirectly for Catalyst have incomes that drop to zero forever or leave the province. *Including all of the direct, indirect and induced employment as estimated using the government's BCIOM,²³ there is an estimated total of **9,460 BC jobs** dependent on Catalyst's BC operations in 2008. This implies that each Catalyst direct job creates about 2.3 additional jobs elsewhere in the BC economy.*

- **After Tax Personal Income:** As noted previously, the total wage/benefit package for management/technical employees at the four mills is almost \$ 150,000/yr. and for union employees is about \$ 100,000/yr. Subtracting benefits and income taxes and other deductions, the annual take home pay for the average Catalyst employee is \$54,000/yr. With 2,902 employees, this equates to total annual disposable income in BC of \$ 156 million per year. (Including benefits and taxes, the total gross payroll in 2007 was \$ 304 million.). *Further, using an average after tax indirect and induced worker salaries of **\$25,300 and \$19,400 per year²⁴** and the BC-wide indirect/induced employment estimated, the total after tax personal income generated by Catalyst jobs in BC is **\$323 million/yr.***

Note that assuming an average of 1,800 hours per year worked and the average Catalyst pre-tax (but excluding benefits) salary of \$ 67,829/yr., the average hourly wage is \$ 37.68, This is orders of magnitude higher than many service sector wage rates that are in the \$ 8-\$ 12 hour area, now becoming prevalent with the growing services sector in BC, and compares favourably with the average hourly wage rate in BC of \$ 21.26.

- **Economic Output:** This is roughly equivalent to gross sales revenues. In 2007, revenues for Catalyst's BC operations overall were \$ 1.715 million. Using output multipliers for the pulp/paper industry taken from the BCIOM, further indirect sales revenues are

²³ Source of BCIOM multipliers for Pulp Mills (NAICS #32211) – see Footnote #6.

²⁴ Source of average indirect and induced salaries – see Footnote #5. Assumes BC average indirect/induced salaries are equivalent to southern Vancouver Island area.

generated by those supplying goods/services to Catalyst and by those businesses that rely on the re-spending of wages by the direct and indirect workers employed. *Including these multiplier effects, total economic output created by the Catalyst in BC is estimated to be **\$3.739 billion** in 2007.*

- **Gross Domestic Product:** This economic indicator, known as “GDP,” takes economic output and nets out the revenues earned by intermediate goods/suppliers in order to arrive at the true “value added” of the economic activity. The GDP created by the indirect and induced economic activity is also estimated using BCIOM multipliers. *In total, the amount of provincial GDP created by Catalyst in 2007 is estimated to be **\$1.149 billion**.* This amount was estimated independently from a previous report by *Fiscal Realities Economists*, which estimated Catalyst GDP to be \$0.961 to \$1.1 billion.
- **Federal and Provincial Taxes Paid:** Since Catalyst’s overall sales revenues for 2007 are known to be \$1.715 billion, the amount of taxes paid to governments can also be estimated using the BCIOM. The tax parameters that are included in the model account for personal income taxes, corporate income taxes, as well as indirect taxes (e.g., sales taxes). *Based on its 2007 sales revenues, total federal taxes paid arising from direct, indirect, and induced economic activities are estimated at **\$117 million** in federal revenues and provincial revenues amount to **\$130 million** per year.*
- **Local Property Taxes:** *According to its 2008 Property Tax Notices, a total of **\$22.3 million** in property taxes was paid to the four municipalities where Catalyst’s pulp/paper mills are located, comprising 76% of the total property paid by these facilities. In 2007, Catalyst estimates it paid **\$32.3 million** in property taxes to all authorities.*