

# DRIVING EFFICIENCY

CATALYST PAPER 2009 SUSTAINABILITY REPORT





2009 FOCAL POINTS

# NEW MARKET REALITIES



1

# SHARED STAKES IN SUCCESS



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# LIGHTER PRODUCT FOOTPRINT



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# OUR COMPANY

Catalyst Paper is a leading producer of specialty printing papers and newsprint in North America and a recognized leader in sustainable business practices.

It sells diverse products to retailers, publishers, commercial printers, and paper manufacturers globally. With six facilities located in British Columbia and Arizona, including a paper recycling mill, Catalyst has an annual production capacity of 2.5 million tonnes.

Catalyst's reputation for environmental stewardship is based on commitments to paper recycling, certified fibre, chain-of-custody verification, rigorous carbon management, and manufacturing and distribution efficiency. Combined with cost discipline, product quality, and service excellence, our approach to sustainability enhances Catalyst's competitive position in the market.

For more information on Catalyst Paper and its operations and products, visit [www.catalystpaper.com](http://www.catalystpaper.com)



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# PRESIDENT’S MESSAGE

Most people understand sustainability to mean “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”



This definition took on special importance for Catalyst in 2009 as we adjusted our operations to reflect a 21 per cent drop in mechanical paper demand. The unprecedented decline was due, in part, to the economic recession. It also reflected structural changes in the print advertising and publishing industries as commercial use of internet media expanded.

That meant that in 2009, efficiency, affordability and accountability were the cornerstones of our business

and the common themes in our engagement with stakeholders. Inside the business, we focused relentlessly with employees on making progress toward our \$80-per-tonne labour cost target. Externally, we worked with environmental groups and industry partners to achieve Forest Stewardship Council certification in the Great Bear Rainforest of coastal British Columbia. And within the policy arena, we advocated for a level playing field and competitive business conditions, tackling issues

relating to both subsidization of competitors and taxation in our operating communities.

Standing still is not an option in today’s circumstances and Catalyst will continue to build on actions taken in the past year as we adapt to a new and constantly changing business reality.

In our financial report we focus on the steps taken to reduce costs wherever possible, including idling some 40 per cent of our production

## Key Milestones

2009

FEBRUARY	APRIL	MAY	JUNE
Announced indefinite idling of kraft production at Crofton, and of remaining paper production at Elk Falls	Snowflake recycling mill achieved Forest Stewardship Council (FSC) chain-of-custody certification  United Steelworkers and IBEW locals at Snowflake ratified one-year extension of labour agreements due to expire in 2010  Q1 net earnings attributable to the company of \$20.1 million (reflected a \$30.7-million gain on debt buy-back)	Announced workforce reductions in keeping with production curtailment, including first-ever layoffs of non-union staff	Petitions filed in Supreme Court of British Columbia seeking judicial review of tax rates in four municipalities where Catalyst operates mills

capacity in 2009 to match customer orders. In our sustainability report, we acknowledge the social impacts of reduced production and closure of one of our mills for much of the past year, which was a major factor behind a workforce reduction of 860 employees.

Today's competitive climate also requires us to address longstanding community expectations that are no longer sustainable for our mills. One example is the property tax levy on our mills, a crisis of such urgency that it prompted our petitions to the British Columbia Supreme Court and our campaign to raise awareness and enlist the support of a broad cross-section of stakeholders in search of a government-led solution outside of the courts.

In taking what some view as radical actions, we know that we have challenged stakeholder expectations of our business and its place in the

communities where we operate. We also believe that we have begun a much-needed examination of what sustainability means today, and what is required of our company and stakeholders in order to achieve a truly sustainable future.

Nevertheless, as we challenged unsustainable expectations of our business, we kept our values of honesty and respect in mind. And, our commitment to open communication and the principles of the United Nations Global Compact led us to publish this seventh consecutive sustainability report, a track record few companies can claim.

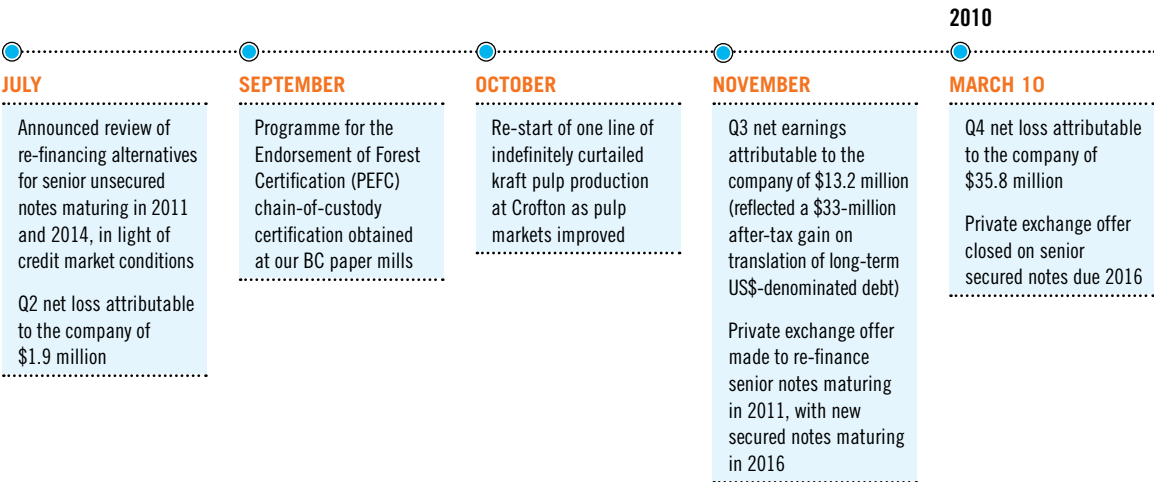
There is no denying that our commitment to sustainability is built on cost efficiency. It has to be. To be efficient means that we will achieve the highest-value outcomes by using less and wasting less of the finite resources available. And this,

we believe, is consistent with the ideals of sustainable development.

In considering the progress made over the past three years, let me emphasize three points. First, despite challenges, I believe there is a future for our business and the products we make. Second, we are taking the necessary steps to enable Catalyst to be a survivor in the short term. Third, with the support of employees and communities our prospects for long-term sustainability can and will improve significantly.



**Richard Garneau**  
President and Chief Executive Officer  
March 2010





## ABOUT THIS REPORT



Catalyst Paper's seventh sustainability report highlights three priorities – new market realities, employee and community relationships, and the environmental footprint of products. These were first identified in an employee survey and materiality analysis in 2008 and were determined to remain relevant in 2009, based on business conditions and a range of stakeholder indicators. Along with features on business issues, this report includes environmental, social and governance disclosure, and detailed performance results.

Unless otherwise stated, information in this report is for the period January 1 to December 31, 2009, and relates to all of Catalyst's wholly owned operations and world-wide sales. Dollar amounts are expressed in Canadian dollars. In the case of the Snowflake recycling mill, unless otherwise stated, outputs and

performance are from its acquisition date (April 10, 2008). Where relevant, results for Canadian operations only are included for comparison with earlier years. There have been no significant changes to reporting scope or metrics since the last report, nor have there been significant changes relating to Catalyst's size, structure or ownership.

This report constitutes Catalyst's Communication on Progress as a signatory to the United Nations Global Compact. Catalyst's broader disclosure process includes its annual report and web site ([www.catalystpaper.com](http://www.catalystpaper.com)), and Catalyst self-declares this process to Global Reporting Initiative Application Level C (see index, page 35).

Feedback on this report is welcome, and can be sent to [barb.kelso@catalystpaper.com](mailto:barb.kelso@catalystpaper.com).

### EXTERNAL RECOGNITION

During 2009, Catalyst was named:

- One of the 50 Best Corporate Citizens in Canada, by *Corporate Knights* magazine
- One of the 50 Most Socially Responsible Corporations in Canada, by Jantzi Research and *Maclean's* magazine
- A Climate Disclosure Leader in the Carbon Disclosure Project, by the Conference Board of Canada
- A top-ranked company in aboriginal relations (second in forest products sector), by *Corporate Knights* magazine

Catalyst also remained on the Jantzi Social Index, made up of 60 Canadian companies that pass a set of broad-based environmental, social and governance rating criteria.



# KEY PERFORMANCE STATISTICS

Social	2009	2008	2007
Lost-time injury frequency <sup>1, 2</sup>	2.06	2.23	2.06
Medical incident rate <sup>3</sup>	4.23	4.49	3.70
Employee population (individuals) <sup>4</sup>	1,851	2,711	3,023
Payroll (\$ millions) <sup>5</sup>	193	264	304
Charitable donations (\$ thousands) <sup>6</sup>	74	102	239

## Economic (\$ millions)

Total taxes paid	24.0	49.0	49.2
Total sales	1,201.7	1,849.4	1,714.6
Net earnings (loss) attributable to the company <sup>7</sup>	(4.4)	(219.8)	(36.5)
Market capitalization	76	115	337
Return on capital employed (%) <sup>8</sup>	2.7	(2.1)	2.5

## Environmental

Greenhouse gas emissions <sup>9, 10</sup>	908,504	1,050,003	431,780
Total reduced sulphur (TRS) emissions <sup>11, 12</sup>	17	138	154
Particulate emissions <sup>11, 12</sup>	366	932	733
Biochemical oxygen demand (BOD) <sup>10, 11</sup>	574	1,180	1,596
Total suspended solids (TSS) <sup>10, 11</sup>	1,987	3,735	3,490
Water use <sup>13</sup>	107,944,486	160,343,785	165,846,744
Fuel energy use <sup>14</sup>	25,519,857	43,375,581	41,038,926
Electricity use <sup>10, 15</sup>	3,814,740	5,071,671	5,067,222
Solid waste disposal <sup>13</sup>	194,991	260,386	154,475
Old newspapers and magazines recycled <sup>10, 11</sup>	456,751	530,225	170,272

A complete glossary of terms and definitions is on page 37

1 Incidents per 200,000 hours worked

2 2008 figure updated to reflect post-year-end adjustments based on injury progression/duration

3 Incidents per 200,000 hours worked

4 Excludes vacancies

5 Includes all salaries and wages paid, excluding benefits and severance

6 In addition to cash donations, land valued at \$270,000 was donated to Ducks Unlimited at the time of its purchase of a larger parcel

7 Catalyst adopted U.S. Generally Accepted Accounting Principles effective December 31, 2009, comparative information is in accordance with U.S. GAAP

8 2007 figure updated to reflect a calculation adjustment

9 Tonnes (carbon dioxide equivalency)

10 2008 figure updated to reflect a calculation adjustment

11 Tonnes

12 Based on actual test results, NPRI data may differ because they utilize emission factors and include other sources (such as miscellaneous kraft mill stacks)

13 Cubic metres

14 Gigajoules – includes fossil fuels and renewables

15 Megawatt-hours – includes purchased and self-generated

This report contains forward-looking statements. Forward-looking statements are statements, other than statements of historical fact, that address or discuss activities, events or developments that Catalyst Paper expects or anticipates may occur in the future. These forward-looking statements can be identified by the use of words such as “anticipate”, “could”, “expect”, “seek”, “may”, “likely”, “intend”, “will”, “believe” and similar expressions or the negative thereof. These forward-looking statements reflect management’s current views and are based on certain assumptions and factors management believes are appropriate in the circumstances, including assumptions that there will be no material change to the regulatory environment in which the company operates, capital budgeted for certain goals will be available, and existing relationships with stakeholders will be maintained. Such forward-looking statements are subject to risks and uncertainties and no assurance can be given that any of the events anticipated by such statements will occur nor if they do occur, what benefit Catalyst will derive from them. No forward-looking statement is a guarantee of future results. A number of factors could cause actual results, performance or developments to differ materially from those expressed or implied by such forward-looking statements, including technological and regulatory changes, cost constraints, Catalyst’s ability to successfully obtain operational and environmental performance improvements, and other factors beyond its control. Catalyst disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

## STEADY PROGRESS

Against the backdrop of sweeping change within a mature industry, Catalyst has made sustainability a key element of business strategy for more than a decade.

But it's been in the past two years that the pace of change and adaptation shifted into high gear. Environmental expectations are prevalent as structural decline in paper demand, disruptive technologies, and print-industry consolidation are re-shaping the competitive market. And long-standing employee and community expectations are also being re-visited.

While the company's name, ownership, board and executive have changed, sustainability has remained a core value. Over seven consecutive sustainability reports, Catalyst has disclosed performance results that reflect challenges and setbacks, as well as significant progress. As a case in point, milestones on two environmental priorities are noted below.



CLIMATE CHANGE		FIBRE CERTIFICATION
2004	Became a charter member of The Climate Group	Introduced independently verified chain-of-custody system at Port Alberni and Powell River
2005	Signed World Wildlife Fund Climate Savers agreement, committing to 70% emission reductions	Expanded independent chain-of-custody verification
2006	Participated in first Canadian iteration of global Carbon Disclosure Project (CDP)	Achieved FSC chain-of-custody certification at Paper Recycling Division
2007	Launched Catalyst Cooled™, manufactured carbon neutral products	Increased certified output at Paper Recycling Division from 40 to 60%
2008	Listed for second time as CDP Climate Disclosure Leader; maintained >70% reduction	Increased both tonnes sold and number of customers buying certified product
2009	Listed for third time as CDP Climate Disclosure Leader; maintained >70% reduction	Achieved PEFC chain-of-custody certification at Canadian paper mills, FSC chain-of-custody certification at Snowflake

We believe such progress is evidence of a systematic approach that integrates social and environmental considerations with operational efficiency and financial objectives.



# GOVERNANCE AND GUIDANCE

Corporate governance is meant to ensure that shareholder returns are maximized over time, and that strategic risks and opportunities are identified and addressed. Combined with other forms of strategic guidance, it is integral to a successful sustainability strategy.

### GOVERNANCE OVERVIEW

Catalyst has a nine-member board of directors with four standing committees and publicly disclosed governance standards, terms of reference, and guidelines ([www.catalystpaper.com/about/governance](http://www.catalystpaper.com/about/governance)).

The governance committee is responsible for best-practices monitoring, annual board effectiveness evaluations, and director development.

The environment, health and safety committee is responsible for evaluations, establishing principles, and monitoring compliance in these areas, and receives quarterly reports from designated executives and senior operational officers.

Seven of the nine directors were independent in 2009, including the chair. The exceptions were CEO Richard Garneau and director Denis Jean, who provided consulting services to Catalyst. Director compensation is publicly disclosed and largely equity based.

No shareholder resolutions were proposed for either the annual general meeting held in April 2009 or the one scheduled for April 2010.

### CODE OF ETHICS

A Code of Corporate Ethics and Behaviour applies to Catalyst's board, executives and employees. It addresses financial-transaction recording, bribery, political contributions, conflicts of interest and competition law. Salaried employees are asked to review it annually and certify their acceptance and compliance.

Employees can anonymously report concerns regarding accounting or other code-related matters via a dedicated telephone line. No information was brought to management's attention during 2009 suggesting a code breach, nor were any investigations initiated.

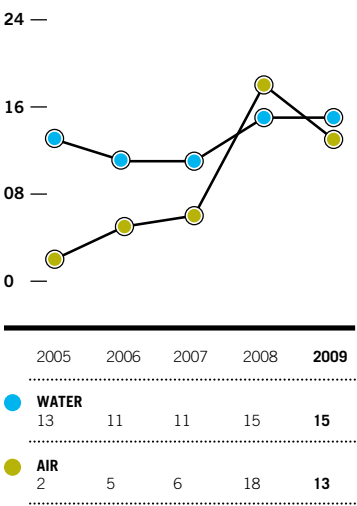
### RISK ASSESSMENT AND MANAGEMENT SYSTEMS

Catalyst maintains a comprehensive inventory of major risks and management responses, including probability and severity assessments. Updated annually, with operational and executive input, it is then reviewed by the audit committee.

All manufacturing facilities are registered to the ISO 14001:2005 environmental standard and, except for the Paper Recycling Division, are also registered to either the ISO 9001:2000 or 9001:2008 quality standard.

In both cases, there are independent and internal surveillance audits annually, and independent re-registration audits every three years. Independent audits focusing on regulatory compliance are commissioned every second year.

### Non-compliance Events by Emissions (corporate wide)



There were no non-compliance events at Snowflake in 2008 or 2009



STAKEHOLDER RELATIONS

Catalyst routinely engages with individuals and groups that are either positively or negatively affected by its operations, and with which it may or may not have a direct financial relationship.

Engagement is tailored to the circumstances of each relationship and is often open ended and flexible. Engagement principles include transparency, respect and a focus on mutual interests and solutions that are practical and affordable for all parties.

Among our stakeholders are investors, employees, suppliers, customers, operating-area residents, regulators, aboriginal groups, governments and non-governmental organizations.

Among these relationships are long-standing partnerships with:

- **World Wildlife Fund Canada**  
Catalyst has both supported WWF's work and engaged its expertise, with a particular focus during 2009 on the Clean Production Initiative (see page 19).
- **Coast Forest Conservation Initiative** This industry group has engaged with the Rainforest Solutions Project to reduce ecological risk in the Great Bear Rainforest and in 2009 achieved Forest Stewardship Council certification (see page 15).
- **Metafore/GreenBlue** A leader in providing better information to the marketplace on the environmental impact of forest products, Metafore was acquired in 2009 by GreenBlue, a non-profit institute that focuses on the positive re-design of industrial systems.



# NEW MARKET REALITIES



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**Catalyst was confronted during 2009 with market and economic conditions that were among the most difficult in decades. Challenges extended across the full supply chain from raw-material sourcing to end-product use.**

Large demand and price declines were among the new market realities, driven by increased digital communication and other disruptions to the business models of large paper users. Catalyst responded with a steady focus on efficiencies, cost reductions and significant production cuts, as is detailed in its financial report. Contextual information on Catalyst's business environment and strategy appears below.

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## **GOVERNMENT SUBSIDY IMPLICATIONS**

Market challenges were compounded as fuel-subsidy programs in the United States were tapped by some American paper producers to obtain credits for burning black liquor, a byproduct of the kraft pulping process. Adding small amounts of fossil fuel to the black liquor, which has long been used as an alternative fuel, resulted in billions of dollars in subsidies for some while being closed to others, including paper recycling mills.

Canadian industry and government lobbying was unsuccessful in persuading the U.S. government to close this loophole before the credit's expiry at the end of 2009.

However, the Canadian government acted to offset the black liquor subsidy through the Green Transformation Program. This will support energy efficiency and environmental improvement, but eligibility was tied to kraft pulp production during 2009. Catalyst qualified for merely \$18 million in credits, due to curtailment of pulp production at Crofton as a result of weak markets and fibre shortages.

## **PRODUCT DIVERSIFICATION**

With reduced demand, and the recovery outlook uncertain, filling order books depended even more on meeting a wide range of needs. Catalyst therefore improved its ability to shift among products and to develop new ones.

Snowflake was a single-product newsprint mill when Catalyst bought it in 2008. Its entry to the specialty papers market was enabled by capital investments and process changes during 2009, and the mill can now produce recycled uncoated Electrabrite for use in retail inserts.

The brightness and printability of Electracote Brite, developed at Port Alberni a year earlier, was improved in 2009 and product diversification at Powell River led to development of both book-grade paper and Electrastar Max, an even higher brightness uncoated grade. All three are versatile communication papers developed with resource efficiency and related market expectations in mind.



CUSTOMER RELATIONS

Well-tailored responses to specific needs, packaged with strong technical service, resulted in customer-relations wins even during a year as challenging as 2009. An example was the role Electrabrite Lite (EBL) continued to play in transforming what used to be a relatively small newsprint-based relationship with a major commercial printer.

EBL is a specialty grade and a higher-brightness alternative to newsprint that is price competitive and popular for use in advertising inserts. Significantly increased sales volumes resulted over the past few years as the printer made a nearly complete conversion from newsprint to Catalyst EBL at its western North American operations, and volumes held steady in 2009.

The conversion enabled the strengthening of this relationship during 2009 and better differentiated Catalyst as a supplier. Catalyst and the printer each benefited from the efficiencies that come with more consistent production and use of a single product. EBL's brightness benefits were also evident to the printer's end-use customers.

PERSPECTIVES ON THE PAPER INDUSTRY

"The worst should be over, but we are in uncharted waters. There is one basic question: are magazines in a downward spiral, similar to newspapers, in which great improvement is simply a less drastic decline, or will magazines rebound with an improving economy, and prove they have staying power? A case can be made for both scenarios."

Reel Time Report Forecast Issue  
(November 2009)



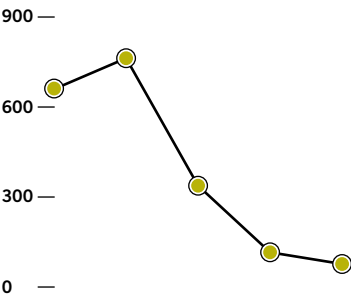


### SUPPLIER RELATIONS

Obtaining products and services for less was one means of improving returns during 2009. Savings were achieved at Snowflake, for example, through a new management contract for the on-site farm (where treated effluent is used to irrigate feedlot crops). Under the new contract, Catalyst no longer assumes the risk relating to crop prices.

But the focus is increasingly on higher returns through closer collaboration. During 2009, strategic suppliers were more fully integrated into product-development efforts. Their testing facilities were used, and their training and technical expertise more fully drawn on. This aligns with leaner staffing, the need for fast responses to market demands, and the importance of ensuring new processes are low-cost from the outset.

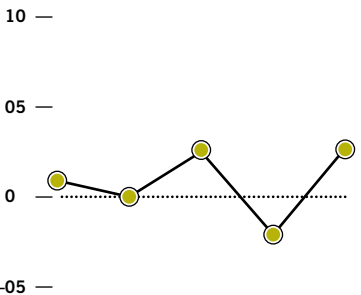
### Market Capitalization (\$ millions)



2005	2006	2007	2008	2009
659	762	337	115	76

Market value is based on shares outstanding and share price at year-end; this measure is an indicator of ability to attract capital

### Return on Capital Employed (%)



2005	2006	2007	2008	2009
0.9	0.0	2.5	(2.1)	2.7

Return on capital employed is based on total capital utilized but excludes restructuring costs and asset-impairment charges (source: PricewaterhouseCoopers); this measure is an indicator of ability to attract capital; 2007 figure updated to reflect a calculation adjustment

### Customers

	2009	2008	2007	2006	2005
<b>Catalyst evaluations vs industry average</b>					
Coated paper	better	better	better	better	worse
Uncoated paper	better	better	better	better	better
Directory paper	better	better	better	better	better
Newsprint	better	better	same	worse	worse
<b>Complaints received</b>	<b>1,111</b>	<b>976</b>	<b>1,135</b>	<b>1,191</b>	<b>1,252</b>
<b>Claims paid (\$ millions)</b>	<b>\$ 1.99</b>	<b>\$ 1.10</b>	<b>\$ 1.05</b>	<b>\$ 1.48</b>	<b>\$ 3.26</b>

The increase in claims paid reflects a large single claim resulting from issues arising (and subsequently corrected) when new equipment was brought online at a mill

Complaints received excluding Snowflake: 2008 – 862, 2009 – 1,019; claims paid excluding Snowflake: 2008 – \$0.74 million, 2009 – \$1.89 million  
Claims paid figures for previous years updated to reflect post-year-end adjustments based on final claims settlements

# SHARED STAKES IN SUCCESS



Important drivers of Catalyst’s ability to lower costs and respond quickly to market opportunities are beyond its exclusive control and must be addressed collaboratively by those with a shared stake in future success.

Catalyst continued during 2009 to work with its employees to reach and maintain competitive labour costs. More flexible working arrangements were an important objective, as they contribute to labour efficiency. Catalyst also intensified its efforts to address excessive and unsustainable property taxation by British Columbia municipalities where it operates, including legal action.

## WORKING ARRANGEMENTS AND LABOUR COSTS

Catalyst and union locals at its Crofton kraft pulp operations and Port Alberni and Powell River mills agreed in 2008 and 2009 on labour cost-reduction plans. While the plans are mill specific, workforce reductions are often involved.

The plans support further cost reductions through more flexible working arrangements. A cooperative commitment of this type made it possible to re-start one line of kraft pulp production at Crofton when market conditions improved in the fourth quarter.

While the plans reference an \$80-per-tonne labour-cost target, Catalyst sees them as vehicles for continuous improvement, since competitive realities are likely to require even stronger performance over time.

At Snowflake, two union locals agreed to one-year contract extensions during 2009, due to challenging business conditions.

More broadly, a company-wide review streamlined Catalyst’s organizational structure and created more consistency among mills and clearer accountabilities.

Workforce reductions also occurred within the salaried workforce to better align corporate functions with reduced production levels. The overall workforce reduction of 860 positions reflects: the permanent closure of pulp and containerboard production at Elk Falls in late 2008, additional curtailments in 2009, and implementation of labour cost-reduction plans at Powell River and Snowflake.

## Employees by location

(year end 2009)	
Crofton	489
Elk Falls	38
Paper Recycling	44
Port Alberni	282
Powell River	381
Snowflake	298
Corporate & US Sales Office	238
Surrey Distribution Centre	81

## Total employees and payroll

Year	Workforce	Total paid (\$ millions)
2009	1,851	\$193
2008	2,711	\$264
2007	3,023	\$304
2006	3,655	\$316
2005	3,729	\$317

Workforce excluding Snowflake: 2008 – 2,389, 2009 – 1,553  
Payroll excluding Snowflake: 2008 – \$242 million, 2009 – \$170 million  
Workforce figures are at year-end and exclude vacancies; total paid figures include all salaries and wages paid, excluding benefits and severance





### COMPETITIVE TAXATION

Catalyst has called for action on municipal taxation of major industry in British Columbia for many years, where property taxes levied on its mills are far above the consumption of services.

During 2008, Catalyst proposed that its 2009 tax payments be based on allocation of municipal costs for consumed services plus 30 per cent, as taxes are a deductible business expense. To enable municipal budgeting certainty, Catalyst committed to pay \$1.5 million to each municipality for 2009 as detailed consumption-by-class studies for each community were completed. These studies confirmed that \$1.5 million exceeded the cost of services provided to Catalyst mills; however 2009 tax bills were reduced only modestly from 2008.

As a last resort, Catalyst sought judicial review of the reasonableness of the tax rates levied on its mills. Court decisions in late 2009 acknowledged the serious economic problem, but held that the matter was properly addressed by governments and not by the courts (with the exception of ruling in favor of Catalyst on the regional district portion of the Campbell River tax levy).

In addition to filing legal appeals, Catalyst continued to work cooperatively to secure a government-led, long-term solution to the major industry taxation crisis.

### ELK FALLS RE-START PROPOSAL

In September 2009, at the request of Elk Falls union locals, Catalyst presented a proposal to re-start two specialty paper machines at this indefinitely curtailed mill. It involved workforce reductions, and labour-cost savings including a wage cut and benefit reductions. It also included provision for profit sharing. Catalyst believed the proposal would enable consistent mill operation at an industry-competitive cost structure. Discussions with the union locals had not proceeded further at year-end.

### Taxes – property taxes include school district and other provincial levies

(\$ millions)	2009 paid	2009 levied	2008	2007	2006	2005
<b>Other taxes<sup>1</sup></b>	<b>11.8</b>	<b>11.8</b>	18.0	17.1	22.0	23.9
<b>Property taxes</b>						
Crofton (North Cowichan, B.C.)	2.5	7.0	8.5	8.8	8.3	8.0
Elk Falls (Campbell River, B.C.)	2.5	6.2	7.6	8.0	8.1	8.1
Paper Recycling (Coquitlam, B.C.)	1.4	1.4	1.4	1.4	1.4	1.3
Port Alberni	2.2	5.6	6.5	7.2	7.4	7.4
Powell River	2.3	4.5	6.0	5.9	6.1	6.3
Snowflake	0.7	0.7	0.4	—	—	—
Corporate and support offices	0.6	0.6	0.6	0.8	0.2	0.5
<b>Total</b>	<b>24.0</b>	<b>37.8</b>	49.0	49.2	53.5	55.5

1 Includes income taxes; large corporation capital taxes; capital, logging and sales taxes; British Columbia carbon tax. Other taxes excluding Snowflake: 2008 – \$17.8 million, 2009 – \$11.6 million.



### Property taxes – municipal portion only

(\$ millions)	2009 paid	2009 levied	2008 consumption- based amount <sup>1</sup>	2008 levied
North Cowichan	\$1.5	\$5.9	\$1.0	\$6.7
Campbell River	\$1.5	\$4.8	\$1.1	\$5.2
Port Alberni	\$1.5	\$4.8	\$0.6	\$5.2
Powell River	\$1.5	\$3.7	\$0.8	\$4.6

1 Consumption-based amounts are sourced from detailed analyses commissioned by Catalyst ("MSM Reports", [www.catalystpaper.com/sustainability/municipal-property-taxation](http://www.catalystpaper.com/sustainability/municipal-property-taxation)) and include a 30% adjustment to account for tax deductibility

### PERSPECTIVES ON INDUSTRIAL PROPERTY TAXES

"This is not a case where an irritated corporate taxpayer rushes to court to challenge its tax rates. Catalyst has been trying for more than a half decade to address a structural issue which is widely recognized to be a problem."

Judgment of the Hon. Mr. Justice Voith,  
Catalyst Paper Corp. v. District of North  
Cowichan (October 16, 2009)

"It's a choice between having high taxes now and maybe having no taxes in the future. That's the dilemma the mayor and council are in."

Tom Walker, Mayor of North Cowichan  
The Globe and Mail (October 26, 2009)

### POTENTIAL INFRASTRUCTURE COLLABORATION

Discussions began during 2009 regarding co-use of Catalyst infrastructure by local municipalities – potentially including sewage treatment and water supply at Port Alberni, and sewage treatment and disposal at Powell River.

This could make fuller-capacity use of mill infrastructure and cost-effectively meet community needs. Further consideration of the business case, permitting implications, and other issues will proceed during 2010.

# LIGHTER PRODUCT FOOTPRINT



3

## Despite challenges for Catalyst and its customers, market insistence on high environmental standards continued to intensify during 2009.

Catalyst maintained its focus on lightening the footprint of its raw-material use, manufacturing processes, and distribution channels, and expanded its certifications. These efforts represented opportunities for competitive differentiation and for cost reductions through more efficient resource use, and the potential for improved returns based on superior environmental performance.

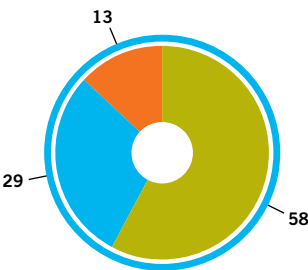
### CERTIFICATION AND PRODUCT LABELING

Catalyst achieved chain-of-custody certification from the Programme for the Endorsement of Forest Certification (PEFC) at its four British Columbia paper mills during 2009. Tracking of certified fibre has been externally verified since 2004, but PEFC allows Catalyst and its customers to label select products. PEFC is an independent non-profit with wide marketplace recognition.

During 2009, 42 per cent of fibre delivered to the British Columbia paper mills was certified, mainly to one of two PEFC-recognized standards (Canadian Standards Association and Sustainable Forestry Initiative). This also included Forest Stewardship Council (FSC)-certified recycled pulp from the Paper Recycling Division (PRD) delivered prior to the PEFC certification.

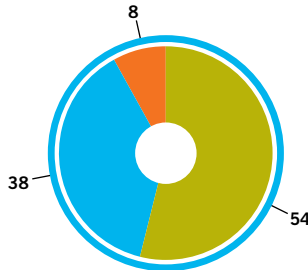
FSC is not PEFC-recognized, but was recognized under the chain-of-custody system previously in place. Catalyst achieved FSC certification, comparable to that already in place at PRD, at its Snowflake recycling mill. Recovered paper meeting the FSC post-consumer criteria made up 69 per cent of all fibre delivered to PRD during 2009, and 81 per cent of all fibre delivered to Snowflake from April onward (when its FSC certification became effective).<sup>1</sup>

**Fibre Type and Percentage**  
(% 2009)



- SAWMILL WOOD CHIPS
- RECOVERED PAPER
- PULP LOGS

**Geographic Origin – Non-recycled Fibre**  
(% 2009)



- B.C. COAST
- B.C. INTERIOR
- U.S. PACIFIC NORTHWEST

### FSC IN THE GREAT BEAR RAINFOREST

The Coast Forest Conservation Initiative, an industry non-profit society, achieved FSC sustainable forest management certification for some 850,000 hectares in British Columbia's Great Bear Rainforest in 2009. This was an outcome of more than a decade of collaboration to transition to lower-impact forestry. While it does not manage forests, Catalyst is a member of the society and expects to receive FSC-certified fibre from the region beginning in early 2010.

<sup>1</sup> In January 2010 Catalyst announced that the previous curtailment of one paper machine at Crofton, to which PRD supplied deinked pulp, would be indefinite. PRD was then indefinitely curtailed in February 2010. This was due to weak newsprint and directory demand and to recovered paper cost and quality issues.



ENERGY AND CARBON MANAGEMENT

Catalyst's Canadian operations used purchased power during 2009 amounting to 89.6 per cent of a benchmark based on previous consumption. Price premiums apply to purchases above 90 per cent of this benchmark (with annual usage calculated from April to March). Extensive self-generation using primarily carbon-neutral biomass fuels (mainly wood wastes) continued at the Canadian paper mills.

Energy-efficiency improvements at Canadian operations included an additional energy recovery project at Port Alberni, involving use of vented steam from the refining process to heat water. Two new energy manager positions were created with co-funding from BC Hydro, the provincial electricity utility.

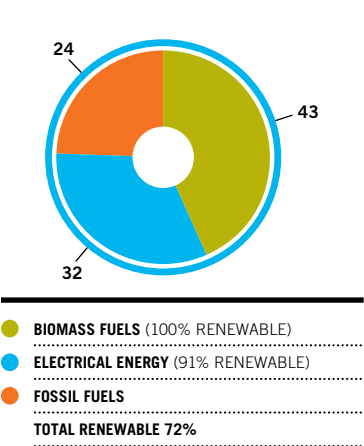
Catalyst qualified for \$18 million in credits under the Canadian government's Green Transformation Program. Appropriate energy and environmental-improvement projects were being considered at year-end.

SNOWFLAKE'S ENERGY FOOTPRINT  
– COMPARATIVE CONSIDERATIONS

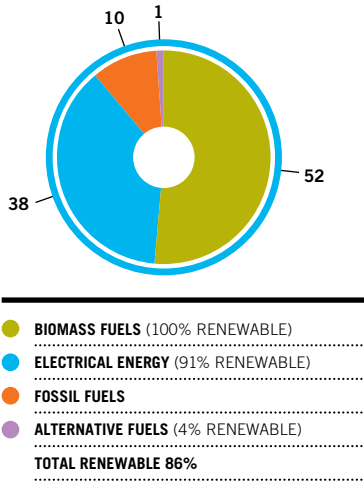
As a mill that self-generates almost all of its energy (electricity and steam), Snowflake's footprint is large compared with a typical recycling mill that buys its power from the grid and therefore does not account for uses and loss of energy at the generation stage. While Snowflake used 25.7 GJ of fuel energy per tonne of production in 2009, paper production required only 11 GJ per tonne. The mill's carbon footprint also reflects the impact of self-generation as it results in much higher scope 1 direct emissions, and very low scope 2 emissions, which are associated with purchased electricity.



Energy Mix and Renewability –  
Corporate Wide<sup>1</sup>  
(% 2009)



Energy Mix and Renewability –  
Canadian Operations<sup>1</sup>  
(% 2009)



PERSPECTIVES ON  
PAPER'S ENVIRONMENTAL FOOTPRINT

"There is no question that print media can and must do a better job of managing the sustainability of its supply chains and waste streams, but it's a misguided notion to assume that digital media is categorically greener. Computers, e-readers and cell phones don't grow on trees and their spiraling requirement for energy is unsustainable."

Don Carli, Institute for Sustainable Communication (September 17, 2009)  
<http://sustainablecommunication.org>

<sup>1</sup> Figures do not equal 100 due to rounding

CLIMATE CHANGE

Catalyst exceeded its commitment as a World Wildlife Fund Climate Savers member to reduce absolute greenhouse gas (GHG) emissions from its Canadian operations to 70 per cent below 1990 levels by 2010. Absolute emissions in 2009 were 85 per cent below 1990 levels, as Catalyst continued to focus on energy and operational efficiency, and due to production curtailments.

On an intensity basis, emissions at Canadian operations were down 17 per cent from 2008 while at Snowflake they were up 32 per cent.

Increased GHG and energy-use intensity at Snowflake mainly reflected the impact of frequent and significant curtailments in 2009, during many of which the main boiler remained in operation to

supply the mill with power. A less favourable operating range for the main boiler, after the 2008 closure of a corrugating medium paperboard machine, was among other contributing factors.

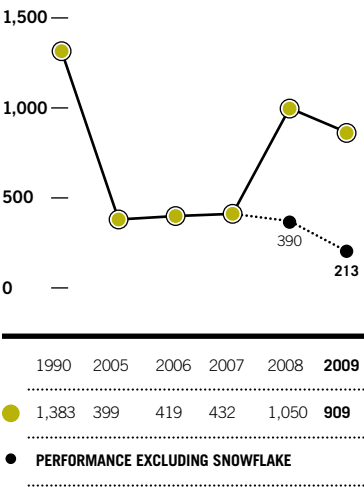
GHG intensity at Paper Recycling Division was similarly increased by frequent short-term curtailments, during which the boiler continued to operate to heat buildings and systems, as well as by reduced availability and use of landfill-derived methane (an alternative fuel). Increased GHG intensity at Powell River resulted primarily from a shortage of hog fuel (biomass) in the early part of the year, and the resulting need to substitute fossil fuels. A further contributing factor was a longer-than-usual maintenance shutdown of the power boiler,

during which production continued, and which further increased fossil-fuel requirements.

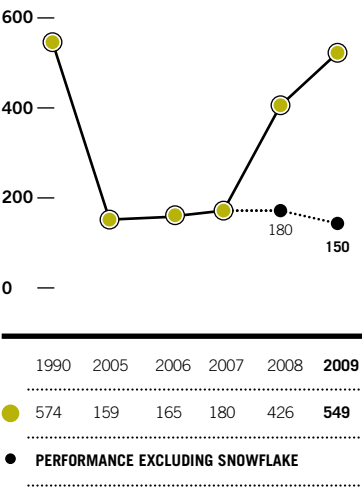
Catalyst continued to sell Catalyst Cooled™ products, for which all manufacturing-related carbon emissions are offset, and a wide range of light-weight products – thus capitalizing on the commercial opportunities represented by climate change.

British Columbia has already enacted a carbon tax and ambitious GHG emission-reduction targets of 33 per cent by 2020, relative to 2007, and mandatory reduction targets may come into force in the United States. New GHG data collection and reporting requirements will apply at Catalyst operations in both British Columbia and Arizona beginning in 2010.

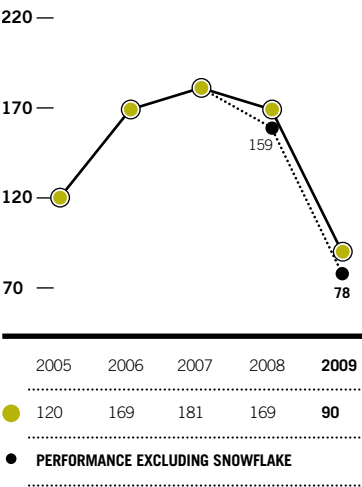
GHG Emissions Absolute<sup>1,2</sup>  
(thousand tonnes CO<sub>2</sub>e)



GHG Emissions Intensity<sup>1,2</sup>  
(kg CO<sub>2</sub>e per tonne)



GHG Emissions Indirect<sup>1</sup>  
(World Resources Institute scope 2, thousand tonnes CO<sub>2</sub>e)



1 2009 results reflect reduced production, see page 23  
2 2008 figures updated to reflect calculation adjustment



SUPPLY CHAIN MANAGEMENT

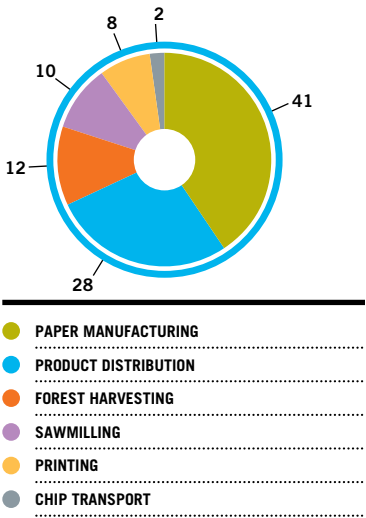
Catalyst participated in a study of carbon impacts and supply-chain collaboration relating to the Catalyst Cooled™ manufactured carbon neutral paper it sells to Wenner Media for use in *Rolling Stone* magazine.

While paper manufacturing was found to be the largest carbon contributor, it accounted for well under half of total supply-chain emissions. This underscored the importance of comprehensive carbon management.

Consistent with this finding, Catalyst focused on reducing the impacts of its product distribution during 2009, mainly through improved efficiency of outbound shipments.

Catalyst was also registered as a partner in the U.S. Environmental Protection Agency’s SmartWay program. The company met threshold requirements relating to outbound volumes carried by SmartWay-registered shippers, and to the scores those shippers have earned based on their own fuel-efficiency and emission-reduction efforts. Catalyst has also added SmartWay participation as a selection criterion for new carriers.

Catalyst Cooled™ Supply Chain – Carbon Contributions (%)



See full report at [www.catalystpaper.com/media/reports-resources](http://www.catalystpaper.com/media/reports-resources)



CLEAN PRODUCTION INITIATIVE

Implementation of the Clean Production Initiative (CPI), developed in partnership with World Wildlife Fund Canada, focused during 2009 on mill emissions to air, land and water.

WWF determined the significance of specific emissions through a weighted assessment of volumes and of their behaviour and toxicity impacts. The scope and frequency of emissions measurement were increased, and the origins of emissions in major raw materials and supplies assessed.

All mills have used the WWF methodology to develop an annually updated list of 20 priority emissions and related actions. Many actions during 2009 related to metals emissions, to which wood chips and biomass supplies appear to be naturally occurring contributors.

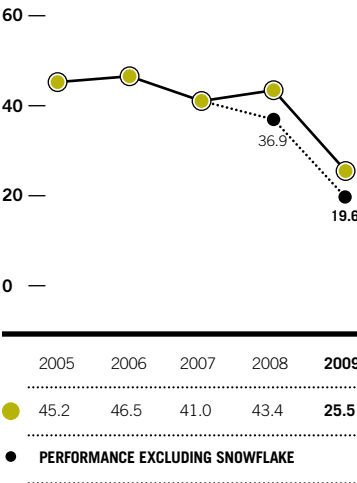
IMPROVED INSIGHT

These are the six largest volume substances reported by the Crofton mill to the National Pollutant Release Inventory. However, as was found at all facilities, they rank quite differently by volume than they do by their significance scores based on the WWF methodology (described immediately above). This spotlights the value of better guidance and prioritization resulting from the CPI.

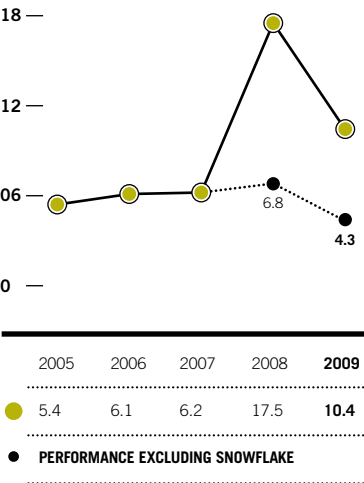
Substance	Volume in tonnes	Ranking by volume	Ranking by WWF significance score
Sulphur dioxide	3,224	1	53
Carbon monoxide	1,472	2	23
Nitrogen Oxides	1,087	3	7
Hydrochloric acid	458	4	20
Methanol	316	5	58
Manganese	239	6	8



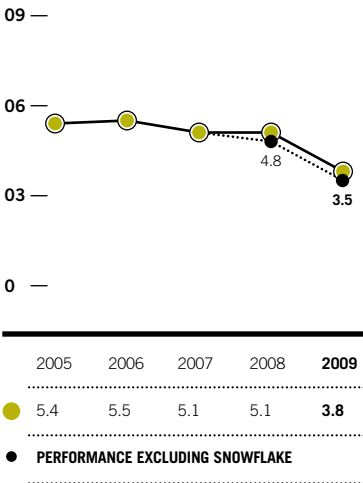
Total Fuel Energy Use <sup>1</sup>  
(fossil fuels and renewables)  
(millions of GJ)



Total Fossil Fuel Use <sup>1, 2, 3</sup>  
(millions of GJ)



Total Electricity Use <sup>1</sup>  
(purchased and self-generated)  
(millions of MWh)



1 2009 results reflect reduced production, see page 23  
2 Total fossil fuel use is included in total fuel energy use  
3 2008 figures updated primarily to correct a calculation error that resulted in a significant under-statement of Snowflake fossil fuel use

# DATA AND ADDITIONAL REPORTING

## SOCIAL AND ECONOMIC

### COMPENSATION AND REPRESENTATION

Catalyst provides a competitive base salary and benefits package for non-union employees. Performance-based compensation was not paid to these employees for 2009 due to corporate financial conditions.

Changes were announced in 2009 to benefit and pension plans for non-union employees, intended to reduce Catalyst's costs while maintaining competitive plans. Among other changes, longer-service employees who previously participated in a defined-benefit pension plan (closed to new participants since 1994) will begin to accrue benefits on a defined-contribution rather than defined-benefit basis. This was already the case for most non-union employees.

Compensation, benefits and pensions for hourly employees are specified in collective agreements, and most participate in multi-employer pension plans providing defined benefits (to which Catalyst contributes a fixed per cent of earnings). Locals of the following unions represented about 70 per cent of Catalyst employees at year-end (number of Catalyst members in brackets):

#### Canadian operations

Canadian Office and Professional Employees Union (2)
Christian Labour Association of Canada (83)
Communications, Energy and Paperworkers Union of Canada (680)
Pulp, Paper and Woodworkers of Canada (282)

#### Snowflake

Carpenters Union (8)
International Brotherhood of Electrical Workers (33)
United Steelworkers of America (179)
United Transportation Union (3)

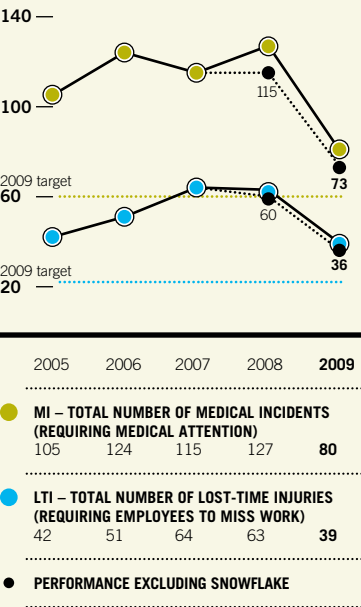
Includes active employees only

SAFETY

Corporate-wide safety targets were not achieved during 2009, although some operation-specific targets were, most notably at Snowflake. Performance was, however, stronger in the second half of the year, and all measures except severity improved from 2008. Continued refinement of tiered audits, involving routine mill-floor interaction between salaried and hourly employees, is believed to have been the main improvement driver. Other initiatives included implementation of mill safety-program audits conducted quarterly with salaried and hourly employee involvement, and changes relating to policy, training and accountabilities.

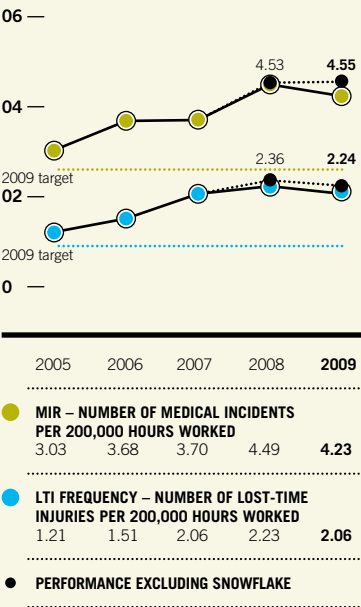
Catalyst does not expect to meet a long-standing target of cutting lost-time injuries and medical incidents in half by 2010, relative to 2006, but continued momentum and defined further improvement are targeted. Additional resources will include full-time safety professionals at all paper mills.

Total MIs and LTIs



Targets are for corporate-wide performance  
2008 figures updated to reflect post-year-end adjustments based on injury progression/duration

MIR and LTI Frequency



Severity



The increase in severity is accounted for primarily by the indefinite curtailment of the Elk Falls mill. Injured employees are precluded from returning to work while the mill remains curtailed, and therefore continue to accumulate "missed" days that add to the severity measure.

ABORIGINAL RELATIONS

Efforts continued to complete a sale of two Port Alberni-area dams to the Hupacasath First Nation. Due in part to the lengthy process involved in transferring the water license, completion of the sale was further extended into 2010. While a joint environmental committee was inactive during 2009, Catalyst donated surplus office trailers from Elk Falls to the We Wai Kai First Nation. They were re-located and will be used for delivery of employment training.

Catalyst is among the large number of claimants in the long-standing Little Colorado River Adjudication – a judicial proceeding in Arizona intended to comprehensively determine the extent and priority of water rights, including those of Indian tribes.



ECONOMIC IMPACT

Catalyst makes substantial contributions to the local economy of operating communities and to the economy of jurisdictions where it buys goods and services. During 2009, this included:

2009 spending

(\$ millions)	Canadian operations	Snowflake	All operations
Fibre and other raw materials ("furnish")	\$ 248	\$ 46	\$ 294
Energy	153	17	170
Other purchases	340	66	406
Capital spending	9	3	12
Total	\$ 750	\$ 131	\$ 882

Variation in Snowflake total due to rounding

With the additions of salaries and wages of \$193 million (see page 12) and taxes paid of \$24.0 million (see page 14), the total direct economic impact of Catalyst's activities during 2009 was \$1.1 billion.

CHARITABLE DONATIONS AND COMMUNITY INVOLVEMENT

Catalyst made charitable donations during 2009 although, consistent with business realities, they were relatively modest. And a long-standing spirit of collective philanthropy among employees remained strong.

During 2009, Catalyst employees raised and donated some \$131,000 to the United Way, supplemented by a corporate donation of \$33,000. Similar employee involvement included a team entry and fundraising in support of the Easter Seals 24-Hour Relay in British Columbia. And Snowflake employees brought household recyclable paper to an on-site collection point, with the value of the paper donated to a camping program for disabled children.

A further illustration occurred during the December festive season. An employee-initiated call went out at head office to support a program through which families of modest means receive gifts and other assistance to brighten their holidays. The response was so strong that two families were ultimately sponsored.

Such initiatives reflect the community-mindedness of individual employees and their desire to work together to improve the lives of others in their communities, even at a time of considerable uncertainty within their own workplaces.

Donations

(\$ thousands)	2009	2008	2007	2006	2005
Total charitable donations <sup>1</sup>	74	102	239	320	345
Total United Way donations <sup>2</sup>	164	255	300	460	443

Figures above are corporate-wide

- 1 Donations to Canadian and U.S. charities as reported for tax purposes; in addition to cash donations, land valued at \$270,000 was donated to Ducks Unlimited at the time of its purchase of a larger parcel. Charitable cash donations excluding Snowflake: 2008 – \$88,000, 2009 – \$41,000
- 2 Employee plus corporate donations; total United Way donations excluding Snowflake: 2008 – \$229,000, 2009 – \$143,000

DUCKS UNLIMITED

The sale of some 200 hectares of wetlands adjacent to the Crofton mill was completed in 2009. The land was not needed for mill operations and ranks very high in habitat values. It will be managed mainly for conservation use by Ducks Unlimited. Contributions from the BC Trust for Public Lands helped make this \$3-million transaction possible.

# ENVIRONMENTAL

## REDUCED PRODUCTION

Most corporate-wide environmental measures in this report show improvement in 2009 over 2008. While in some cases this reflects operational improvement, the large reduction in production – mainly at Elk Falls, Snowflake and Crofton (see table below) – was a more significant factor overall. (In contrast, there was an opposite trend in 2008, due to the second-quarter acquisition of the Snowflake recycled newsprint mill.) However, production curtailments often increase intensity measures, such as those on a per-tonne-of-production basis. Various auxiliary uses of water, for example, are only reduced to a limited extent as production drops. Some mill-specific measures are provided on a per-day basis (days being ones on which the mill was at least partially operating) and these control to an extent for the impacts of curtailments.

<b>Production</b> (tonnes)	<b>2009</b>	2008	2007	2006	2005
Crofton	<b>463,782</b>	728,333	773,407	732,550	765,606
Elk Falls	<b>53,048</b>	565,762	690,690	830,697	807,954
Paper Recycling	<b>125,266</b>	130,880	142,416	141,716	146,019
Port Alberni	<b>301,482</b>	278,150	296,335	336,466	345,732
Powell River	<b>480,049</b>	469,325	484,555	468,365	445,030
Snowflake (all figures are for full year)	<b>232,106</b>	400,898	444,412	456,274	454,859

## AIR

### Permit and Performance Issues

Air-related regulations include restrictions on stack emissions of total reduced sulphur (TRS) and air-borne particulates, and there were no permit non-compliances in 2009. Particulate-related air-quality objectives at Canadian operations were met 100 per cent of the time.

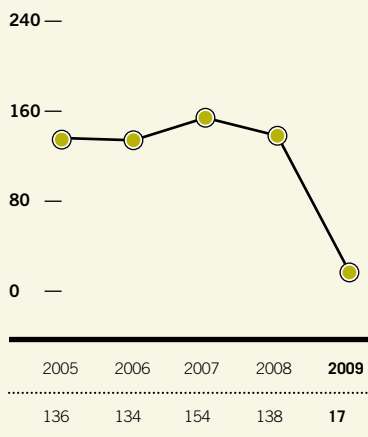
TRS is generated only at Crofton and Powell River, and air-quality objectives were met 95.8 per cent of the time (based on daily-average measurements). The decline from 97.3 per cent in 2008 was due to the relocation of monitoring equipment to within the Powell River mill site (where results do not reflect air quality in the nearby community). The relocation resulted from changes in the mill's configuration, and allows for better identification of specific TRS sources.

Snowflake continued to work with state regulators on amending and renewing its Title V permit, which regulates all its air-emission sources, including developing a new particulate compliance assurance plan for its main power boiler.

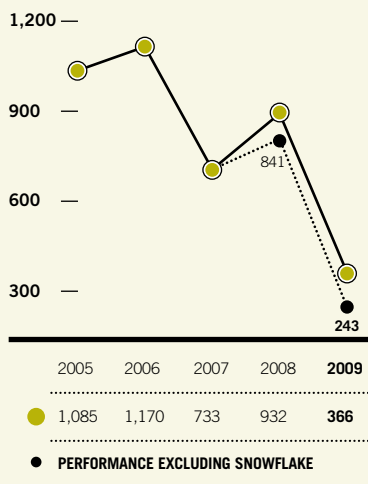
A long-standing issue relating to absence of real-time measurement of TRS and sulphur dioxide from the recovery boiler at Crofton was resolved with installation of equipment from the closed Elk Falls kraft pulp mill. Crofton also discovered and addressed a particulate control design flaw on its biomass boiler. Initial testing indicated a substantial emissions reduction, which will be quantified in 2010 along with a permanent correction.

Powell River received increased odour-related community complaints. These were traced mainly to poor management of waste sludge during an unexpected shutdown of the power boiler (in which sludge would normally be burned), and to high bacteria levels at the secondary effluent treatment plant. Procedural changes and other preventative measures had been implemented or were being developed at year-end.

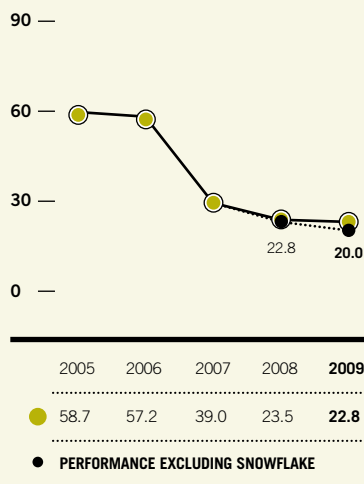
**Total TRS** <sup>1, 2, 3</sup>  
(tonnes/year)



**Total Particulate**<sup>2, 3</sup>  
(tonnes/year)



**Total Dioxin and Furan Releases<sup>2</sup>**  
(grams/year)



1 Relevant at Canadian operations only

2 All figures based on actual test results; NPRI data may differ because they utilize emission factors and (in the case of TRS and particulates) include other sources (such as miscellaneous kraft mill stacks)

3 2009 results reflect reduced production

## Ozone-depleting Substances

Releases of ozone-depleting substances (ODS) that meet defined criteria must be reported to regulatory authorities. Releases at Snowflake totaled 422 kg during 2009 (releases averaged 272 kg over the previous four years), but none were reportable due primarily to the timeliness of responses. In British Columbia, all releases of 10 kg or more are reportable, and such releases totaled 161 kg at Catalyst's operations during 2009 (see also Appendix 1).

Plans for prioritized conversion or replacement of equipment containing more than 10 kg of ODS refrigerants were developed at Crofton, Port Alberni and Elk Falls, and all such equipment at the closed Elk Falls kraft pulp mill was decommissioned and the ODS refrigerants recovered. A similar plan for ODS is in development at Powell River and Snowflake mills.

See “Air emissions” pages 26-27.

## WATER

## Water Use

Water use is under growing scrutiny and while Catalyst has reduced its water-use intensity – it was down more than a third in 2009 relative to 1999 – it remains a relatively heavy user among paper manufacturers.

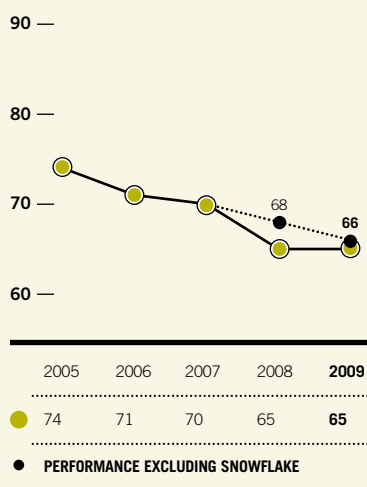
With the exception of the Paper Recycling Division, which is connected to municipal utilities, Catalyst mills use ground and surface water from wells, lakes and rivers. They are authorized to withdraw up to annual maximum amounts in return for fixed payments.

All mills have water-use intensity targets, and performance against them is reported quarterly to the board. Reduction was not a focal point during 2009, and production curtailments typically lead to increased intensity.

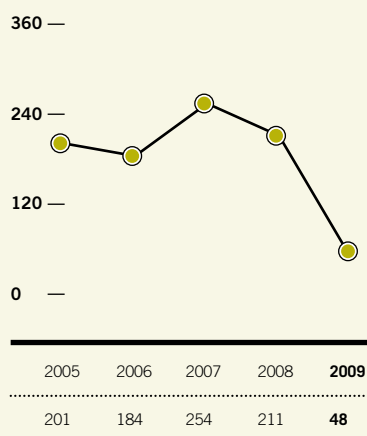
Increased operational awareness and reduced water use is a goal for 2010. Inter-connections between energy and water conservation, and the expanded range of energy management initiatives expected to be undertaken, will be leveraged.



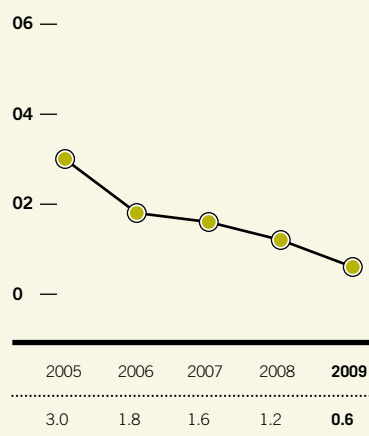
**Company Average Water Use**  
(m<sup>3</sup>/tonne)



**Total AOX** <sup>2, 3</sup>  
(tonnes/year)



**Total BOD** <sup>1, 2, 3</sup>  
(thousands of tonnes/year)



## Water Quality and Management

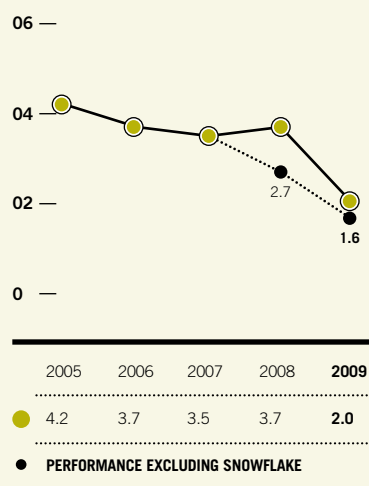
Catalyst paper mills discharge treated wastewater into the environment and regulatory volume, quality and monitoring requirements apply. Related 2009 initiatives included collection and pumping system upgrades at Crofton and Port Alberni, respectively.

Ten de-commissioned concrete-hulled ships have been in place at Powell River for decades to form a breakwater. Extensive work was undertaken during 2009 on the largest and oldest of them, the Peralta, to improve its structural integrity and remove oil and other contaminants, thus reducing water-related risk.

Catalyst remained involved in integrated planning through the Cowichan and Somass Basin Water Management forums, and its Canadian paper mills continued to meet all sampling, testing and other requirements under the federal Environmental Effects Monitoring program.

See “Effluent” and “Water use”, pages 28-29.

**Total TSS** <sup>1, 3</sup>  
(thousands of tonnes/year)



- 1 2008 figure updated to reflect calculation adjustment
- 2 Relevant at Canadian operations only
- 3 2009 results reflect reduced production, see page 23

Air emissions (by mill)

	2009	2008	2007	2006	2005
<b>Crofton</b>					
Total GHGs as kg CO <sub>2</sub> e/year	112,063,000	162,866,000	149,920,000	131,293,000	127,325,000
Total GHGs as kg CO <sub>2</sub> e/adt	242	224	194	179	166
Particulate matter kg/day	565	906	722	1,059	850
Particulate matter kg/adt	0.43	0.43	0.34	0.53	0.40
Sulphur Oxides kg/day	2,329	9,392	11,026	11,324	6,210
Sulphur Oxides kg/adt	1.79	4.45	5.20	5.64	2.96
TRS kg/day	115	192	245	195	207
TRS kg/adt pulp	0.164	0.180	0.211	0.197	0.195
Power Boiler Dioxin ng/m <sup>3</sup> TEQ	0.02	0.03	0.09	0.05	0.08
Ambient TRS % compliance A level 24-hr average	97.3	99.1	97.7	98.3	95.8
Ambient PM2.5 98th percentile (ug/m <sup>3</sup> )	13.7	13.9	13.9	13.6	14.5
Ambient PM10 % compliance A level	100	100	100	99.99	100
<b>Elk Falls</b>					
Total GHGs as kg CO <sub>2</sub> e/year <sup>1</sup>	13,639,000	149,988,000	170,967,000	213,800,000	185,201,000
Total GHGs as kg CO <sub>2</sub> e/adt <sup>1</sup>	257	265	248	257	229
Particulate matter kg/day	216	1,329	1,215	2,019	2,005
Particulate matter kg/adt	0.22	0.68	0.54	0.84	0.84
Sulphur Oxides kg/day	92	2,089	1,881	2,500	2,093
Sulphur Oxides kg/adt	0.09	1.00	0.84	1.04	0.95
TRS kg/day	n/a	184	176	171	165
TRS kg/adt	n/a	0.23	0.19	0.22	0.23
Power Boiler Dioxin ng/m <sup>3</sup> TEQ	0.04	0.04	0.37	0.13	0.04
Ambient TRS % compliance A level 24-hr average	n/a	100	99.7	98.6	99.5
Ambient PM2.5 98th percentile (ug/m <sup>3</sup> )	12.1	11.9	13.1	12.8	25.7
Ambient PM10 % compliance A level	100	100	100	100	100
<b>Paper Recycling</b>					
Total GHGs as kg CO <sub>2</sub> e/year	7,304,000	6,100,000	7,653,000	5,603,000	8,173,000
Total GHGs as kg CO <sub>2</sub> e/adt	58	47	54	40	56
Particulate matter kg/day <sup>2</sup>	0.02	0.12	0.27	0.49	0.30
Particulate matter kg/adt	0.000	0.000	0.001	0.001	0.001
Sulphur Oxides kg/day	0.035	0.040	1.820	1.893	0.082
Sulphur Oxides kg/adt	0.0001	0.0001	0.0046	0.0043	0.0002

1 2008 figures corrected to include emissions associated with landfill waste  
2 Reduced particulate emissions reflect the shift from estimated to measured values as part of the Clean Production Initiative (see page 19); lower-than-estimated emissions are a common finding

adt – Air-dried tonnes  
n/a – Not applicable  
ng – Nanogram  
PM – Particulate matter  
TEQ – Dioxin equivalent units  
ug – Microgram

Per day measures are calculated with reference to days on which the facility was at least partially operating  
A complete glossary of terms and definitions is on page 37

## Air emissions (by mill)

	2009	2008	2007	2006	2005
<b>Port Alberni</b>					
Total GHGs as kg CO <sub>2</sub> e/year	37,988,000	36,708,000	61,619,000	44,977,000	52,844,000
Total GHGs as kg CO <sub>2</sub> e/adt	126	132	215	134	153
Particulate matter kg/day	32	20	40	98	107
Particulate matter kg/adt	0.035	0.024	0.043	0.100	0.114
Sulphur Oxides kg/day	484	427	477	603	660
Sulphur Oxides kg/adt	0.51	0.45	0.50	0.65	0.70
Power Boiler Dioxin ng/m <sup>3</sup> TEQ	0.09	0.27	0.41	0.36	0.12
Ambient PM10 % compliance A level	100	100	100	100	100
<b>Powell River</b>					
Total GHGs as kg CO <sub>2</sub> e/year	42,116,000	34,557,000	41,621,000	22,917,000	24,978,000
Total GHGs as kg CO <sub>2</sub> e/adt	87.7	73.6	85.9	48.9	56.1
Particulate matter kg/day <sup>1</sup>	54	42	33	28	9
Particulate matter kg/adt <sup>1</sup>	0.04	0.03	0.02	0.02	0.01
Sulphur Oxides kg/day	313	277	189	126	235
Sulphur Oxides kg/adt	0.231	0.215	0.143	0.098	0.193
Power Boiler Dioxin ng/m <sup>3</sup> TEQ	0.08	0.01	0.03	0.02	0.01
Ambient TRS % compliance A level 24-hr average	94.2	100	100	100	100
Ambient PM2.5 98th percentile (ug/m <sup>3</sup> )	9.1	9.0	6.9	14.0	7.0
Ambient PM10 % compliance A level	100	100	100	100	100
<b>Snowflake</b> (all figures are for full year)					
Total GHGs as kg CO <sub>2</sub> e/year	695,395,000	907,823,000	871,486,000	866,708,000	865,175,000
Total GHGs as kg CO <sub>2</sub> e/adt <sup>2</sup>	2,995	2,264	1,961	1,900	1,902
Particulate matter kg/day <sup>3</sup>	472	345	267	365	346
Particulate matter kg/adt <sup>3</sup>	0.53	0.31	0.21	0.29	0.28
Sulphur Oxides kg/day <sup>3</sup>	6,949	6,330	3,844	4,710	3,769
Sulphur Oxides kg/adt <sup>3</sup>	7.86	5.76	3.07	3.77	3.02

1 Further increases in particulates in 2009 became known only when the second of two measurements was taken in December (an earlier measurement having been much lower). Contributing factors and corrective actions will be explored in 2010.

2 See discussion page 17

3 Increased particulate and SO<sub>2</sub> emissions reflect the impact of production curtailments and higher emissions factors that applied during 2009. Emissions factors are set annually based on actual test results obtained on a limited number of days and are therefore subject to variation due to factors such as operating conditions and fuel characteristics.

Regulations require measurement of power boiler dioxin emissions at Catalyst's four paper mill in British Columbia. Results are heavily influenced by factors such as operating conditions and fuel characteristics and are often highly variable. Total releases (including fly ash and air emissions) were down in 2009 and all operation-specific emissions were below a 0.1 ng/m<sup>3</sup> TEQ federal standard applicable to power boilers installed since 2001 (even though all Catalyst boilers pre-date 2001).

2009 results reflect reduced production, see page 23

A complete glossary of terms and definitions is on page 37

## Effluent (by mill)

	2009	2008	2007	2006	2005
<b>Crofton</b>					
TSS kg/day	1,373	3,095	2,731	3,376	3,311
TSS kg/adt	0.9	1.6	1.3	1.7	1.5
BOD kg/day	530	1,012	864	1,230	1,270
BOD kg/adt	0.44	0.51	0.41	0.61	0.59
AOX kg/day	322	408	448	305	330
AOX kg/adt pulp	0.46	0.32	0.34	0.31	0.31
2378TCDD ppq	n/d	n/d	n/d	n/d	n/d
2378TCDF ppq	n/d	n/d	n/d	n/d	n/d
Trout toxicity % compliance	100	100	100	100	100
<b>Elk Falls</b>					
TSS kg/day	694	2,071	3,737	3,590	4,970
TSS kg/adt	0.7	1.3	2.0	1.6	2.3
BOD kg/day	796	1,390	2,404	2,600	5,000
BOD kg/adt	0.80	0.90	1.26	1.14	2.26
AOX kg/day	n/a	168	248	199	220
AOX kg/adt	n/a	0.22	0.33	0.25	0.35
2378TCDD ppq	n/a	n/d	n/d	n/d	n/d
2378TCDF ppq	n/a	n/d	4.1	n/d	n/d
Trout toxicity % compliance	100	100	100	100	96
<b>Paper Recycling</b>					
TSS kg/day <sup>1</sup>	569	443	713	396	428
TSS kg/adt <sup>1</sup>	1.7	1.2	1.8	0.9	1.1
BOD kg/day <sup>1</sup>	1,143	703	1,210	1,103	603
BOD kg/adt <sup>1</sup>	3.33	1.96	3.07	2.51	1.50
Trout toxicity % compliance	n/a	n/a	n/a	100	100
<b>Port Alberni</b>					
TSS kg/day	380	352	389	354	500
TSS kg/adt	0.5	0.5	0.5	0.4	0.6
BOD kg/day	190	290	305	400	450
BOD kg/adt	0.23	0.38	0.38	0.43	0.49
Trout toxicity % compliance	100	100	100	100	100
<b>Powell River</b>					
TSS kg/day <sup>2</sup>	1,483	1,330	1,991	2,465	2,400
TSS kg/adt <sup>2</sup>	1.0	1.0	1.5	1.9	1.7
BOD kg/day <sup>2</sup>	652	532	797	778	1,000
BOD kg/adt <sup>2</sup>	0.4	0.4	0.6	0.6	0.7
Trout toxicity % compliance	98.1	100	96.6	100	100
<b>Snowflake (all figures are for full year)</b>					
TSS kg/day <sup>3</sup>	1,256	4,009	2,893	3,068	1,894
TSS kg/adt <sup>3</sup>	2.0	3.5	2.4	2.5	1.5

1 Increases in TSS and BOD are inter-related and reflect the impact of equipment failures and product quality-related operational trials

2 2008 figures updated to reflect calculation adjustment

3 Reduced TSS reflects operational changes at the effluent treatment plant and the cleaning of an effluent collection pond in late 2008

n/d – Non-detectable (test result below two parts per quadrillion)

n/a – Not applicable

2378TCDD, 2378TCDF – Specific dioxin and furan substances

Per day measures are calculated with reference to days on which the facility was at least partially operating

A complete glossary of terms and definitions is on page 37



## Water and energy use (by mill)

	2009	2008	2007	2006	2005
<b>Crofton</b>					
Water use m <sup>3</sup> /adt	71	73	68	65	68
Fuel energy usage GJ	8,395,893	17,298,684	17,683,893	17,946,830	17,290,671
Fuel energy intensity GJ/adt	18.10	23.75	22.86	24.50	22.58
Electricity usage MWh	1,135,131	1,367,436	1,390,892	1,364,452	1,312,911
Electricity intensity MWh/adt	2.45	1.88	1.80	1.86	1.71
<b>Elk Falls</b>					
Water use m <sup>3</sup> /adt	50	67	70	68	68
Fuel energy usage GJ	616,146	9,452,238	12,313,942	15,778,439	14,609,573
Fuel energy intensity GJ/adt	11.60	16.71	17.83	18.99	17.30
Electricity usage MWh	197,565	1,346,489	1,519,768	1,859,371	1,838,519
Electricity intensity MWh/adt	3.72	2.38	2.20	2.24	2.28
<b>Paper Recycling</b>					
Water use m <sup>3</sup> /adt <sup>2</sup>	11	9	9	9	12
Fuel energy usage GJ	125,083	104,183	138,675	137,617	172,284
Fuel energy intensity GJ/adt	1.07	0.80	0.97	0.97	1.18
Electricity usage MWh	55,255	57,546	67,033	67,326	71,286
Electricity intensity MWh/adt	0.44	0.44	0.47	0.48	0.49
<b>Port Alberni</b>					
Water use m <sup>3</sup> /adt	78	75	86	95	101
Fuel energy usage GJ	4,475,620	4,120,219	4,576,657	5,642,218	6,386,313
Fuel energy intensity GJ/adt	14.85	14.81	15.96	16.77	19.09
Electricity usage MWh	742,641	674,704	706,895	835,365	883,288
Electricity intensity MWh/adt	2.46	2.43	2.39	2.49	2.64
<b>Powell River</b>					
Water use m <sup>3</sup> /adt	69	73	78	87	96
Fuel energy usage GJ	5,947,653	5,928,542	6,325,759	6,998,712	6,702,903
Fuel energy intensity GJ/adt	12.39	12.63	13.05	14.94	15.06
Electricity usage MWh <sup>1</sup>	1,414,846	1,347,160	1,382,634	1,364,746	1,339,364
Electricity intensity MWh/adt <sup>1</sup>	2.95	2.87	2.85	2.91	3.01
<b>Snowflake</b> (all figures are for full year)					
Water use m <sup>3</sup> /adt <sup>2</sup>	62	45	34	32	31
Fuel energy usage GJ <sup>3</sup>	5,959,461	8,249,652	8,232,088	8,040,776	8,301,232
Fuel energy intensity GJ/adt <sup>3,4</sup>	25.68	20.58	18.52	17.62	18.25
Electricity usage MWh <sup>3</sup>	269,302	382,974	423,052	410,736	409,100
Electricity intensity MWh/adt <sup>3</sup>	1.16	0.96	0.95	0.90	0.90

1 2008 figures updated to reflect calculation adjustment

2 Increased water use intensity reflects the impact of production curtailments

3 2005 to 2008 figures updated to reflect calculation adjustments

4 See discussion page 17

GJ – Gigajoules

MWh – Megawatt-hours

Fuel energy measures include all purchased fuels and self-generated biomass (black liquor); electricity measures include all purchased and self-generated electricity

2009 results reflect reduced production, see page 23

A complete glossary of terms and definitions is on page 37

SOLID WASTE

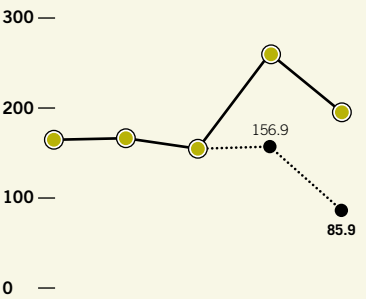
There was expanded commercial use of waste sludge from the Paper Recycling Division in 2009, including use as a soil supplement, landfill cover, and for mulch production. However, there was increased solid waste generation at both PRD and Snowflake due in part to lower-quality recovered paper supplies. Supplies included more contaminants, such as plastics and metals, that cannot be used in production or otherwise disposed of.

An independently owned and operated energy generating facility at Snowflake, commissioned in 2008 and producing carbon-neutral and renewable energy, is expected to significantly reduce landfill requirements. But it did not achieve its targeted consumption of 75 per cent of the mill's sludge production during 2009.

Final approval of a landfill-expansion application at Elk Falls remained pending at year-end. And four appeals were heard of the 2008 approval of a landfill expansion at Powell River, with a decision pending at year-end. The operation used an existing landfill during 2009.

Decommissioning of a leachate treatment facility at Crofton was approved. The Swallowfield landfill has been closed since 1994, and leachate quality has improved to the point where regulatory limits requiring treatment no longer apply. While monitoring will continue, capital upgrade and ongoing operating costs will be avoided.

Total Solid Waste to Landfill  
(thousands of m<sup>3</sup>/year)



2005	2006	2007	2008	2009
164.5	168.1	154.5	260.4	195.0

● PERFORMANCE EXCLUDING SNOWFLAKE

2006 figure updated to correct a reporting error

Solid waste to landfill

(cubic metres per air-dried tonne)

	2009	2008	2007	2006	2005
Crofton	0.059	0.060	0.054	0.074	0.070
Elk Falls	0.083	0.110	0.094	0.065	0.064
Paper Recycling	0.156	0.120	0.102	0.130	0.080
Port Alberni	0.072	0.070	0.067	0.076	0.086
Powell River	0.027	0.034	0.028	0.034	0.040
Snowflake (all figures are for full year)	0.470	0.355	0.222	0.182	0.215

Non-compliances and reportable events

	Crofton	Elk Falls	Paper Recycling Division	Port Alberni	Powell River	Snowflake
2009	8	2	2	4	12	0
2008	12	5	1	1	14	0
2007	5	4	1	2	5	—
2006	0	2	2	0	12	—
2005	2	2	1	0	10	—

See page 33 for details

## Total key materials used as tonnes

	2009	2008	2007	2006	2005
Water <sup>1</sup>	132,107,490	176,518,631	175,027,227	193,620,156	202,775,937
Wood chips and pulping logs	1,094,795	2,207,406	2,304,028	2,484,084	2,770,754
Hog fuel	606,871	541,421	759,933	930,959	872,611
Old newspapers and magazines <sup>2</sup>	456,751	530,225	170,272	173,193	165,257
Fossil fuels <sup>3,4</sup>	337,250	368,684	127,928	130,081	118,210
Precipitated Calcium Carbonate	119,825	117,288	116,391	125,602	104,309
Clay	60,129	77,035	81,057	73,393	66,512
Oxygen	46,282	92,869	103,684	101,762	97,192
Sodium Hydroxide	23,084	47,815	53,778	57,643	56,309
Silicate	22,748	18,973	16,301	15,971	16,296
Hydrogen Peroxide	21,928	29,198	28,155	25,579	28,445
Sulphur Dioxide	10,460	11,168	12,771	17,452	20,315
Starch	10,137	13,409	13,714	15,318	8,739
Sulphuric Acid	7,387	23,822	27,888	28,553	24,708
Urea	6,143	8,724	10,209	10,425	4,910

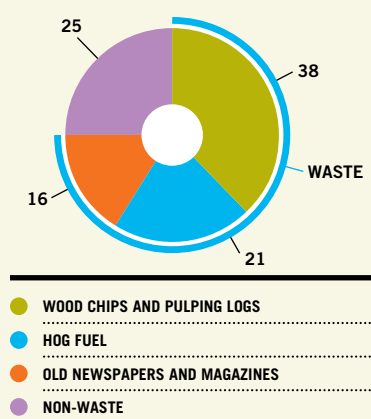
Figures include usage at Snowflake when relevant and reflect its acquisition date of April 10, 2008

- 1 Water use figures in this table include treated effluent, as well as discharges of cooling and storm water; in accordance with standard industry practice, water use as shown in the key performance statistics (and as used to calculate water-use intensity) includes only treated effluent
- 2 2005 and 2008 figures updated to reflect calculation adjustments
- 3 2008 figure updated primarily to correct a calculation error that resulted in a significant under-statement of Snowflake fossil fuel use
- 4 Fossil fuels are typically reported as gigajoules of heating value, however weights – while not reflective of the true heat content of the fuels basket for each year – are recommended for inclusion as part of Global Reporting Initiative reporting

2009 results reflect reduced production, see page 23

A complete glossary of terms and definitions is on page 37

## Key Materials Sourced from Waste (% 2009)



Water consumption is excluded from this total

**Reported NPRI and TRI Emissions**

(not including speciated PAHs and Part 5 VOCs)

(tonnes)	2008	2007	2006	2005	2004
Sulphur Dioxide	4,242	5,034	5,037	3,351	4,706
Carbon Monoxide	2,924	3,137	3,249	3,825	3,627
Nitrogen Oxides	2,399	2,353	2,587	2,585	2,647
Volatile Organic Compounds – total	1,273	1,356	1,388	1,403	1,441
Hydrochloric Acid *	841	953	988	971	824
Total Particulate	801	750	1,043	1,105	1,320
Methanol *	729	649	674	651	663
PM10	667	653	685	604	716
PM2.5	471	529	472	420	493
Phosphorus	449	591	619	700	528
Manganese <sup>1</sup> *	383	276	375	420	417
Ammonia	261	376	356	318	257
Total Reduced Sulphur	201	276	–	–	–
Nitrate Ion	201	190	218	405	429
Chlorine Dioxide	115	81	13	14	6
Hydrogen Sulphide	74	82	123	123	112
Zinc	56	63	74	85	77
Sulfuric Acid *	41	12	12	12	10
Acetaldehyde	35	40	43	43	37
Phenol	29	31	34	43	27
Barium Compounds *	22	–	–	–	–
Carbonyl Sulphide	20	24	26	26	10
Chloromethane	9	13	14	14	–
Cresol	7	9	10	–	–
Hydrogen Fluoride *	1	–	–	–	–
(kilograms)					
Lead *	4,021	3,078	3,023	2,794	2,564
Arsenic	925	1,353	1,114	813	770
Hexavalent Chromium Compounds	592	882	502	424	365
Sum of PAHs (17) <sup>2</sup>	541	685	564	551	498
Cadmium	219	244	275	267	288
Mercury *	28	5	3	7	10
(grams)					
Hexachlorobenzene (HCB)	414	579	750	426	415
Dioxins and Furans *	25	42	57	60	68

1 2007 figure updated to reflect calculation adjustment

2 2007 figure updated to reflect re-assessment of appropriate emissions factor to apply to Elk Falls recovery boiler

\* 2008 figures include full-year releases from Snowflake

Legislation in both Canada and the U.S. requires facilities such as Catalyst's to annually report releases of any of a large number of substances if they exceed defined thresholds. This includes releases to air, water and land, and volumes sent for disposal or recycling. Reported volumes are based on actual measurement or estimates arrived at using defensible methodologies.

This information is compiled by Environment Canada in the National Pollutant Release Inventory (NPRI), and by the U.S. Environmental Protection Agency in the Toxics Release Inventory (TRI), and is available via [www.ec.gc.ca/inrp-npri](http://www.ec.gc.ca/inrp-npri) and [www.epa.gov/tri](http://www.epa.gov/tri)

The chart above shows the combined total of all releases reported to the NPRI and TRI for all of Catalyst's operations. Full-year releases from Snowflake are included for 2008 (for measures marked with an asterisk\*), notwithstanding the acquisition date of April 10. Since releases are reported in the spring for the previous calendar year, 2009 data were not yet available when this report was prepared.

Data are not included [ – ] in instances where reporting was not required by the regulator. Speciated PAHs, while reported individually to Environment Canada, are reflected in the table above as part of the "Sum of PAHs".

A complete glossary of terms and definitions is on page 37



## APPENDIX 1

# NON-COMPLIANCES AND REPORTABLE EVENTS

### CROFTON

#### Non-compliances

- Bleach plant chlorine dioxide emissions remained above permit – a limit set in 2007 and based on incorrect measurement – despite reduction efforts in 2008; an amendment application was submitted in 2009 (2 non-compliances, one for each quarter of kraft pulp mill operation)
- A surface water sample originating from a new cedar chip pile failed a toxicity test; the discharge was capped, the flow re-directed, the chip pile re-located and preventative measures established
- Ozone-Depleting Substances (ODS) Compliance Review <sup>1</sup>

#### Reportable Events

- Bypass of primary clarifier for repairs; secondary clarifier used, no negative environmental impacts
- Release of chlorine dioxide generator solution into sewer resulting in localized off-gassing; corrective actions taken to prevent valve leaks (amount of chlorine dioxide subsequently found to be below 5 kg reporting threshold)
- Release of 47 kg of ODS and 52 kg of other halocarbons (2 events)

### ELK FALLS

#### Non-compliances

- The sulphur content in coal again moved above permit, despite efforts to address this matter with the supplier; coal use (to supplement hog fuel) was ceased and inventory returned
- ODS Compliance Review <sup>1</sup>

### PAPER RECYCLING

#### Reportable Events

- Failure of effluent pH probe; replacement probe was available and confirmed permit compliance, cleaning and replacement frequency increased
- Above-permit levels of total suspended solids in final effluent (although within a 10%± range, and therefore not considered significant by the regulator), resulting from drainage of an additional piece of secondary treatment equipment prior to a curtailment; procedural and testing changes implemented to avoid recurrence

### PORT ALBERNI

#### Non-compliance

- ODS Compliance Review <sup>1</sup>

#### Reportable Events

- Release of de-watered sludge (estimated at 1 m<sup>3</sup>) on creek bank; corrective actions taken to improve conveyor belt operation
- Release of 65 kg of ODS (2 events)

### POWELL RIVER

#### Non-compliances

- The effluent pH was outside the permitted range at a discharge point for cooling water and storm water on multiple occasions; sources were hog fuel leachate on five occasions and diluted caustic from a bleaching trial on another; the source for one occasion remains unknown; the underground drainage equipment which allowed leachate and caustic to be diverted from the intended route to treatment has been repaired (7 non-compliances)
- Opacity (an air-quality measure) was above permit as a result of procedural error relating to use of high salt-content hog fuel in the power boiler
- Effluent from a storm water outfall failed a toxicity test on December 14; subsequent testing (on an increased frequency) did not repeat the finding and the incident remained under investigation at year-end

#### Reportable Events

- Release of landfill leachate (estimated at 45,600 L) to ground on the mill site as a result of procedural error that caused a valve to be left partially open
- Release of 49 kg of ozone-depleting substances (2 events)

### SNOWFLAKE

- No reportable environmental permit non-compliance issues

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See page 30 for a breakdown of non-compliance performance over the past five years

<sup>1</sup> A provincial ODS compliance inspection took place at Crofton, Elk Falls and Port Alberni in January 2009. Although regulatory authorities had been informed of previous ODS releases as reportable events, a non-compliance was recorded at each mill based on releases over the last several years. Minor record-keeping and other administrative regulatory variances were also identified during the inspection, including both ODS and petroleum storage/storm water regulations at Crofton, and subsequently addressed (see also page 24).

## APPENDIX 2

## SUPPLEMENTAL INFORMATION

The following information relates to various aspects of performance whose disclosure is recommended in sustainability reports, and which are not addressed as stand-alone topics elsewhere in this report.

**INFRASTRUCTURE AND SERVICES OF PUBLIC BENEFIT**

Catalyst maintains and operates water-management infrastructure (including a weir and dams) that serve public interests, and supplies drinking water for the community of Crofton at cost. Discussions were initiated during 2009 regarding possible municipal co-use of Catalyst infrastructure (see page 14).

**INDIRECT GHG EMISSIONS**

Catalyst tracks and discloses indirect GHG emissions (World Resources Institute scope 2) associated with its purchased electricity and steam consumption (see page 17), and in 2009 participated in supply-chain carbon management research (see page 18). It did not have systems in place to measure other sources of indirect GHG emissions, due in part to continued uncertainty as to the allocation of responsibility for these emissions.

**BIODIVERSITY IMPACTS**

Catalyst manages no forests, and continues to divest lands surplus to current operations. A 2009 sale was structured specifically to advance biodiversity objectives (see page 22). Catalyst operates its facilities within regulatory requirements intended to minimize habitat impacts, and engages with fibre suppliers on their management and conservation practices. Various biodiversity-related

aspects of toxicity are factored into the weighting methodology used in the Clean Production Initiative (see page 19).

**MINORITY GROUP MEMBERSHIP**

Catalyst does not track corporate-wide workforce trends relating to age or minority groups, due partly to privacy-related regulations. Policies govern related matters such as employment and pay equity, and harassment.

**FREEDOM OF ASSOCIATION, CHILD LABOUR, FORCED LABOUR**

Catalyst operates in British Columbia and Arizona, where freedom of association, including the right to engage in collective bargaining, is enshrined in law. These jurisdictions are deemed to be at low risk for child and forced labour. Contractual arrangements with suppliers in jurisdictions deemed to be at such risk are made only after a site visit by one or more Catalyst employees.

**CORRUPTION**

Catalyst's Code of Corporate Ethics and Behaviour contains specific anti-corruption provisions relating to bribery, prohibited benefits, and conflicts of interest.

**FINES AND NON-MONETARY SANCTIONS**

Catalyst was not subject to any significant fines or non-monetary sanctions for non-compliance with laws or regulations during 2009, with the exception of penalties and interest in connection with disputed 2009 property taxes (see page 13).

**PUBLIC POLICY AND GOVERNMENT**

Catalyst routinely participates in advocacy on policy matters. Focal points during 2009 included consumption-based municipal taxation (see page 13), and eligibility criteria for the federal government's Green Transformation Program (under which it qualified for, but has not yet received, \$18 million in credits). Catalyst maintained membership in various industry and business associations.

Catalyst also remained involved in discussions regarding climate change policy, including design of a cross-border emissions cap-and-trade program through the Western Climate Initiative.

Catalyst expanded its participation in energy conservation initiatives supported by British Columbia's publicly owned electricity utility, but did not otherwise receive significant government financial assistance in 2009. Political contributions, except in minor forms such as event ticket purchases, must be board approved.

**PRODUCT STEWARDSHIP AND SAFETY**

Catalyst contributed to paper industry product stewardship through extensive use of recovered fibre at its two recycling facilities, but did not participate in specific product-stewardship initiatives in 2009. Catalyst's products are benign from a safety standpoint and its customers well-versed in their handling and use.

APPENDIX 3

UN GLOBAL COMPACT AND GLOBAL REPORTING INITIATIVE

This report constitutes Catalyst’s Communication on Progress as a signatory to the United Nations Global Compact (UNGC), and was developed using the G3 Guidelines of the Global Reporting Initiative (GRI). These are, respectively, the world’s largest corporate citizenship initiative and the world’s most widely used sustainability reporting framework. This table relates report sections to UNGC principles and GRI content. A detailed index encompassing Catalyst’s full disclosure process and citing specific GRI indicators is available at [www.catalystpaper.com/investors/sustainability-reports](http://www.catalystpaper.com/investors/sustainability-reports).



		UNGC				GRI									
		Human Rights	Labour Standards	Environment	Anti-corruption	Strategy and Analysis	Organizational Profile	Report Parameters	Governance	Economic	Environmental	Labour Practices	Human Rights	Society	Product Responsibility
Report Section	Pages														
Introductory Materials	1, 4-6					●	●	●							
President's Message	2-3					●			●						
Governance and Guidance	7-8			●	●	●			●						
New Market Realities															
Government Subsidy Implications	9									●				●	
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# LOOKING AHEAD



During 2010, Catalyst intends to focus on the following objectives and initiatives, which relate to and build from various issues and outcomes described in this report.

## MARKET REALITIES

- Achieve further fixed-cost and labour-cost reductions
- Continue product diversification
- Maintain focus on liquidity

## EMPLOYEES AND COMMUNITIES

- Place safety coordinators at all paper mills and sustain recent improvement in safety results
- Advance transition to competitive and sustainable municipal tax rates
- Explore possible municipal co-use of mill effluent treatment infrastructures at Port Alberni and Powell River

## PRODUCT FOOTPRINT

- Expand energy-management initiatives, in part through leadership of expanded network of mill energy managers (co-funded by BC Hydro)
- Continue implementation of Clean Production Initiative, including input/output measurements and analysis related to metals
- Increase operational focus on water-use reduction



# GLOSSARY

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**A LEVEL TRS** British Columbia's 'A' level ambient odour objective is two parts per billion average or less over a 24-hour day. Percentage compliance with this objective is a measure of the percentage of days in the year during which the daily average was at or below two parts per billion.

**AMBIENT PM2.5** A measure of ambient levels of fine particulates of less than or equal to 2.5 microns. British Columbia's PM2.5 objective is 25 micrograms per cubic metre (24-hour average).

**AMBIENT PM10** A measure of ambient levels of fine particulate of less than or equal to 10 microns. British Columbia's PM10 objective is 50 micrograms per cubic metre (24-hour average).

**ADSORBABLE ORGANIC HALIDE (AOX)**  
A measure of the amount of chlorine bound to an organic substance; occurs in kraft bleaching process.

**BASIS WEIGHT** The weight of a standard amount of paper cut to a standard size; measured in grams per square metre or pounds.

**BIOMASS FUEL** Renewable energy source derived from bark, wood shavings, sawdust (hog fuel), effluent treatment sludges, and black liquor. Biomass is carbon-neutral – burning it releases the same amount of carbon dioxide as was originally sequestered during the growth of the vegetation.

**BIOCHEMICAL OXYGEN DEMAND (BOD)**  
A measure of the amount of oxygen used during biodegradation of effluents over a five-day period.

**CARBON DISCLOSURE PROJECT** An international coalition of institutional investors, that has a combined asset base in the tens of trillions of dollars, makes annual carbon-related disclosure requests to corporations, and then issues national and regional reports.

**CARBON OFFSET** An emissions reduction credit relating to another organization's project that results in less greenhouse gases in the atmosphere than would otherwise occur.

**CERTIFICATION** A voluntary process providing objective evidence that forests harvested to manufacture wood and paper products are managed responsibly; independent, third-party experts verify a company's performance against objectives and standards.

**CHAIN OF CUSTODY** The process of tracking materials used within a manufacturing facility so that the source of raw materials used to make specific end products can be identified. Commonly applied in the context of use of certified fibre supplies.

**CLARIFIER** A tank in which effluents are held to allow solids to settle out. Forms part of an effluent treatment system.

**CO<sub>2</sub>e** Effective greenhouse gas emissions expressed as equivalent tonnes of carbon dioxide. Some greenhouse gases have a stronger warming effect than others; the CO<sub>2</sub>e measure provides an appropriate comparison of the warming effects of every greenhouse gas.

**DIOXINS AND FURANS** Specific chlorine-containing compounds that have been detected in trace amounts in pulp and paper facility emissions. 2378TCDD and 2378TCDF denote specific dioxin and furan substances. A non-detection result is noted as n/d.

**EMISSIONS FACTOR** An estimate of the amount of a specific emission or other discharge over a defined period of time and associated with a particular process or piece of equipment. It is typically defined in terms of volumes of inputs (such as raw materials or fuels) into the process in question.

**FIBRE** Any of various wood-based raw materials used in the production of pulp and paper including wood chips and other sawmilling residuals or waste products, pulp logs (logs of insufficient quality for use as lumber), and paper recovered through recycling programs.

**FIRST NATION** A term used to designate aboriginal groups in Canada. First Nations comprise one of the three aboriginal peoples of Canada, the other two being the Inuit and Métis.

**FOSSIL FUEL** Hydrocarbon-containing natural resources such as coal, petroleum and natural gas.

**GREENHOUSE GASES (GHG)** Gases that prevent heat from radiating out into space, causing an increase in global temperatures. Carbon dioxide is a greenhouse gas produced mostly from combustion of fossil fuels.

**INDIRECT GREENHOUSE GASES**

Greenhouse gas emissions relating to an industrial process but not directly generated by it. Measurement of such emissions, as per the World Resources Institute's Scope 2 definition, is commonly limited to those associated with purchased energy.

**INTENSITY** A measure of an output or other aspect of performance relative to some other variable. Carbon produced per tonne of production, in contrast to an absolute measure of total carbon produced, is an intensity measure.

**ISO 14001, 9001** International standards outlining elements of management systems pertaining to environmental practices and product quality, respectively. Demonstrable adherence to these standards results in ISO registration.

**KRAFT PULPING** A chemical process by which wood chips are broken down and converted into pulp for use in the manufacture of products such as containerboard (used in packaging materials) and paper.

**LEACHATE** Water that has been in contact with waste materials.

**MANUFACTURED CARBON NEUTRAL**

Products manufactured with no net increase of carbon to the atmosphere – as measured by direct GHG emissions – as a result of low-carbon production processes and the purchase of carbon offsets.

**MECHANICAL PRINTING PAPER** Paper including pulp whose fibres were separated by mechanical rather than chemical (kraft) means.

**OZONE-DEPLETING SUBSTANCE**

Chemicals that react with ozone molecules in the atmosphere to destroy them.

**PARTICULATE MATTER** Small particles originating from stack emissions or other sources such as chip piles.

**POWER BOILER** Equipment in which renewable biomass from sawmills and/or fossil fuels are burned to generate electricity and steam for mill operations.

**POWER BOILER DIOXINS** Low levels of chlorinated compounds absorbed into combusted wood ash that originate from sea salt contained in the waste bark fuel. Power boiler dioxins are expressed as dioxin equivalent units (TEQ).

**RECOVERED PAPER** Previously manufactured paper recovered through municipal recycling programs or other means and used as the raw material in recycling mills.

**REPORTABLE EVENTS** Events that are required to be reported to regulatory authorities. They most commonly consist of unintentional releases of materials into the environment that are reportable due to considerations relating to the type or volume of materials released, or the nature of the receiving environment.

**SO<sub>2</sub>** A gas made up of oxygen and sulphur that forms an acid when exposed to water. SO<sub>2</sub> can be an ingredient of acid rain formation.

**SOLID WASTE** Any wastes generated by mills and requiring landfilling. These include boiler wood ash, lime wastes, waste wood, and minor construction and demolition debris.

**TOXICITY** A measure of the degree to which something is toxic – i.e. capable of causing injury or death.

**TROUT TOXICITY** A test that exposes juvenile rainbow trout to liquid substances for 96 hours. A substance is considered non-toxic if less than 50 per cent of the exposed fish die.

**TOTAL REDUCED SULPHUR (TRS) GASES**

Gases with the characteristic smell of rotten eggs or cabbage that are emitted from kraft pulp mill operations and effluent treatment systems.

**TOTAL SUSPENDED SOLIDS (TSS)**

Filterable solids remaining in treated mill water.

**UNITED NATIONS GLOBAL COMPACT**

A voluntary initiative through which corporations commit to align their operations and strategies with 10 principles in the areas of human rights, labour, environment and anti-corruption.

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### **PRODUCTION NOTES**

The inside pages of this report are printed on Electrastar paper with a 66.5 gsm basis weight, produced at Catalyst's Powell River mill. A lightweight uncoated grade, Electrastar has excellent opacity, and is one of the brightest uncoated mechanical papers available in the market today. It is used in retail inserts, publishing, direct mail and advertising pieces, and for general commercial printing.

In accordance with PEFC chain-of-custody, this paper contains 100 per cent certified wood fibre. It is also Catalyst Cooled™, having been manufactured with no net carbon emissions to the atmosphere.

Printed by Blanchette Press, Richmond, British Columbia, using inks that comply with CONEG regulations for heavy metal content and are formulated to contain vegetable-derived raw materials including soya, canola and linseed oils as well as resins derived from pine and fir tree gum.





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## PAPER FACTS

inside pages (71 g)

### Inputs

Raw Fibre (g)	68
% certified sources	100
Filler (g)	11
Water (L)	4.9
Work (person-secs)	0.6
Energy (Cal)	375
% renewable	91

### Emissions

Greenhouse gas (g)	6.2*
Air Particulate (mg)	2.8
Effluent BOD (mg)	28.3
Solid waste (cm <sup>3</sup> )	1.9

This Paper Facts label identifies the weight, inputs and emissions for the inside pages of each paper copy of this report. It demonstrates Catalyst's focus on its operations' environmental footprint as well as its commitment to transparency.

Catalyst produces mechanical printing papers, also referred to as groundwood papers, which do not rely on chemical processes to separate the fibres. Mechanical paper production uses less fibre and energy with fewer emissions than papers made using chemical processes.

While commonly seen in applications such as magazines, catalogues and advertising inserts, Catalyst's annual disclosure reports demonstrate the application of its products in non-traditional uses.

Catalyst customers can use its Paper Facts Calculator at [www.catalystpaper.com/calculator](http://www.catalystpaper.com/calculator) to identify the inputs and emissions of specific weights of Catalyst paper grades, compare them to typical North American sheets, and make informed choices.

\* Catalyst Cooled™ – offset to zero