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# MORE VALUE, LESS IMPACT.

TRUE SUSTAINABILITY is of vital concern to us all: people need an equitable and sustainable society; the planet needs an environment capable of enduring for future generations; and the economy needs profitable activity in order to sustain the social and environmental systems. These three components are inseparable in the Sustainable Enterprise strategy we are implementing at Canfor Pulp.

As you read this supplement you will notice three icons keyed to economic, social and environmental relevance. Often these will overlap. We hope this visual aid will assist you in appreciating how Sustainable Enterprise addresses the whole system as well as its parts.

For more information on our goal to create more value, please see a copy of our 2010 Annual Report, available on our website at [www.canforpulp.com](http://www.canforpulp.com).



## INTRODUCTION TO OUR SUSTAINABLE ENTERPRISE PROGRAM



Where some businesses regard sustainability as a compliance requirement that primarily adds costs, Canfor Pulp Limited Partnership (CPLP) regards sustainability as inseparable from business strategy and an opportunity to create value. Our commitment to this principle has been demonstrated this year as we launched the company-wide strategy of Sustainable Enterprise, tasked with evaluating and transforming all operations with a view to creating more value with less impact. This is an evolution rather than a revolution in our business, because economic and ecological efficiencies have always been linked in our industry. Our Sustainable Enterprise strategy is founded on five core principles:

1. Business success and sustainability go hand in hand
2. Sustainable Enterprise must embrace environmental, social and economic considerations
3. Resources must be used responsibly and ever more efficiently, to create more value from those resources
4. Sustainable Value will be measured and continuously improved
5. All activities must be conducted in a transparent and accountable manner

During 2010 the mandate of Sustainable Enterprise began by identifying existing strengths to build upon, and targeting areas for improvement. Details of our approach and our thinking to date are outlined in this Sustainability Supplement. In 2011 our strategy will apply to all areas of our operation and we will be reporting on our findings and progress in print and online. If after reading this supplement you would like to pass along some suggestions or ideas, please take advantage of the link on our website to do so: [www.canforpulp.com/sustainability](http://www.canforpulp.com/sustainability).



**JOE NEMETH**

Chief Executive Officer,  
Canfor Pulp Limited Partnership

# ECO-EFFICIENCY



## PUTTING SUSTAINABILITY INTO CONTEXT

The success of Sustainable Enterprise comes through realising more value and increased competitive advantage while reducing environmental impacts. This is an approach defined by the World Business Council for Sustainable Development as “Eco-Efficiency.”

Eco-efficiency begins with the proposition that using resources efficiently is good for business and good for the environment.

A unique attribute of our business is that we take the residue of one industry – chips from sawmills – and use more than half of it to create pulp products that can enable our customers to use less energy and less material in their own processes. We use the remainder of that sawmill residue, bark, sawdust and planer shavings, as “hog” fuel, to create energy to power the mills that make the pulp. Becoming ever more efficient in the ways we use the fibre resource is a key driver for our business and one that has benefits for all our stakeholders.

Sustainable Enterprise increases value for all of our stakeholders by:

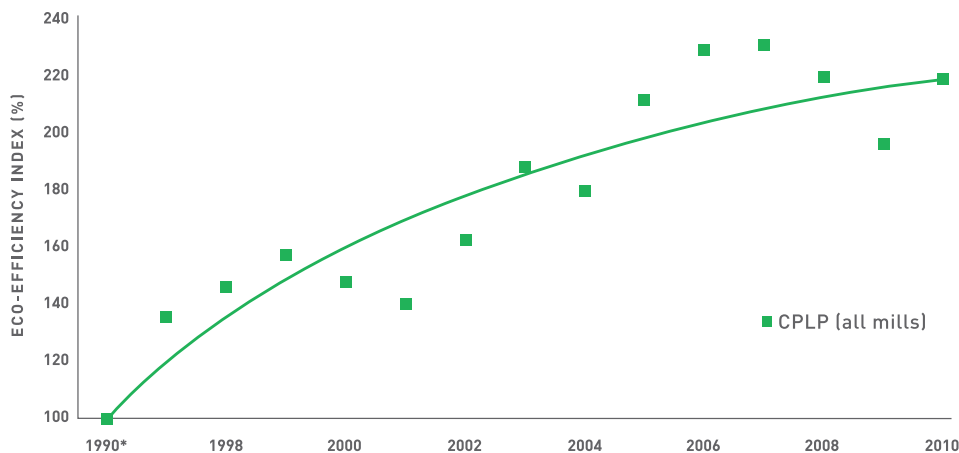
- Increasing the efficiency by which we convert this resource into products – reducing costs and developing new products from sawmill residual materials
- Increasing the amount of “green” energy we generate from this resource
- Improving the properties of the pulp and paper we make for customers – enabling them to become more eco-efficient themselves
- Enabling our customers to provide high-performance, cost effective products to their customers, the end users
- Smoothing out the cyclic nature of commodity markets, ensuring stability of supply, and diversifying our value proposition
- Reducing environmental impacts

By focusing on eco-efficiency we lower our costs of production and improve our financial performance while enhancing the performance of our products for their end-users. This is why we characterize Sustainable Enterprise as: “More Value with Less Impact.”

An example of this approach at work is seen when we consider the results of our attempts to reduce greenhouse gases (GHGs). During the last two decades the amount of GHGs we produce for each tonne of pulp or paper made has steadily dropped, with the result that the GHG Eco-Efficiency Index has more than doubled. During 2011 we will be establishing a set of metrics like this one, for the key resources we use, so that the value we create and the impacts we hope to reduce can be tracked.

## ECO-EFFICIENCY IMPROVEMENT TREND

Greenhouse Gases



\*1990 is used as the baseline year to be consistent with the Kyoto Protocol

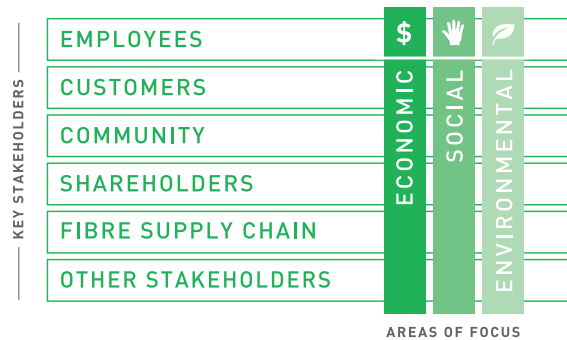
## THE WORLD WE WORK IN

CPLP owns and operates three mills in Prince George, British Columbia, Canada. We convert residual fibre from the softwood lumber operations in our region into high-value pulp and paper which we sell to specialty papermakers, tissue producers, printers and packagers around the world.

The part of the world we work in produces, by the nature of its climate and geography, fibre that is remarkably long, strong and slender, properties which impart strength, smoothness, softness and superior print surfaces to the papers that use it. By efficiently and effectively using this natural resource we are able to be a low cost provider of premium products in demand around the world: Northern Bleached Softwood Kraft (NBSK) and Premium Reinforcing Pulp (PRP).

The elements of the world we work in are highly interdependent. Our “raw material,” wood chips, is the by-product of another industry, and our end products are almost without exception the “raw material” of other businesses. Our ability to create value while reducing costs and environmental impacts doesn’t end with our own operations. It also has the ability to improve the quality of the environment of the community where we operate and even the environmental footprint of our suppliers, our customers and their customers. The diagram to the right is a representation of some of the important interactions between the economic, social and environmental requirements which are essential elements of being a sustainable enterprise and the interests of our various stakeholders.

As we develop our Sustainable Enterprise strategy this year, we will be looking carefully at all of these interactions and seeking opportunities for partnerships where sustainable value can be realised.



### THE STABILITY AND INTEGRITY OF OUR WOOD FIBRE SUPPLY

CPLP owns no forestry operations, cuts no trees and manages no forests; we rely on purchasing residual fibre provided to us by solid wood manufacturing companies in British Columbia. Prior to the 1960s the wood chips, bark and sawdust that are the residue of sawmilling operations in this region were largely wasted, much of it simply burned in “beehive burners.” This was not only detrimental to the environment, it was wasteful and a significant loss of value. With the development of pulp mills in the Prince George area the realisation of value from the “Fibre Basket” of the northern forest has continued to grow. Our history and our business starts from this point and our strategy today is to be ever more efficient and innovative in realising maximum value from the inherently valuable natural forest resource that is available to us.



Although we cut no trees, it is clear that we are an integral part of a larger fibre value chain and so we recognize our shared responsibility to the forests, the community in which we operate, and the environment as a whole.

Canadian Forest Products Ltd, the majority partner in CPLP and our leading supplier of wood chips, holds licenses for more than 9.2 million cubic meters of allowable annual cut (AAC) in the tenures where it operates in BC. The Canadian Forest Products Ltd. forest operations that supply CPLP are independently third-party certified to the CSA Sustainable Forest Management Standard.

## CANADIAN FOREST PRODUCTS LTD. (CFP) – SUSTAINABILITY STATEMENT



In 2006 the pulp and paper operations of Canadian Forest Products Ltd (CFP) became a separate company, CPLP, but CFP remains the our largest supplier of wood fibre and it is also the largest single owner in our company. The working relationship between our two companies has remained close. The following is a statement from the Vice President, Forestry and the Environment of CFP on the economic and environmental principles that link our two companies.

“Canadian Forest Products Ltd. recognizes the value of maximising the value of each tree harvested. In partnering with companies such as Canfor Pulp Limited Partnership (CPLP), CFP is able to make full use of the fibre from each tree removed from the forest. This is beneficial from both an economic and an environmental perspective.

From the economic perspective the partnership with CPLP allows CFP to increase the utility of fibre from the tree. This reduces the overall cost per unit of fibre to CFP.

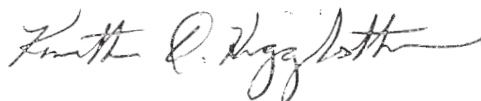
From the environmental perspective, by deriving both timber and pulp fibre from the same harvesting activities, we not only optimize the harvesting of wood fibre, we also minimize the impact to the forest floor, reducing the overall footprint on the landscape.

CFP holds a variety of forest tenures in the Province of British Columbia. With these licenses comes the responsibility to manage the forest resources.

We recognise the need to assure our customers and their end users that the BC forest materials that go into their products come from sustainably managed forests. Addressing this need, in managing its forest tenures, CFP has attained Canadian Standard Organization (CSA) forest certification for its woodlands operations. The CSA certification is recognized under the Programme for the Endorsement of Forest Certification schemes (PEFC).

CFP delivers to CPLP chips from our sawmills, chips generated from logs that cannot make lumber (whole log chipping) and sawmill residue. Because all of these materials are from certified forest areas, CPLP in turn can demonstrate to their customers that the pulp, paper and energy that they produce is derived from sustainably managed forests.

CFP will continue to work with partners, such as CPLP, to ensure that users of our raw material and end users of CPLP products maintain forest certification and chain of custody schemes that meet customer and society expectations. To do so is good for society and good for business.”



**KEN HIGGINBOTHAM,**  
Vice-President,  
Forestry and Environment, CFP

## PROTECTING THE FOREST RESOURCES

The BC interior produces tree species whose fibre properties are in high demand in the global marketplace. Capturing maximum value from this renewable, natural endowment is essential to the economic viability of our company and it is critical also to the economic wellbeing of many forestry-dependent communities. And yet the forests where we operate have clearly-recognized values beyond simply the products that they can produce; they provide carbon storage, watershed control, habitat for wildlife, traditional native medicinal and artistic resources and vast recreational and tourist appeal among many others, not the least of which is beauty. We strongly support efforts designed to recognize and manage all these values. For example, as a member of the Joint Solutions Project, we helped advance these values through seeking sustainable ways to manage highly sensitive ecosystems in the Great Bear Rainforest. The partners in this initiative, including CFP and CPLP, were recognised by the World Wildlife Fund International with their "Gift to the Earth" award in 2007.

Because we do not own any forests or forest tenures ourselves, CPLP relies entirely on others to manage the forests. However it is essential for us to ensure that the suppliers we source fibre from are practicing responsible forestry and production practices. Therefore we require that all our suppliers of wood fibre agree to meet or exceed our minimum standards for supplying fibre. These standards include:

- No illegally harvested wood
- No wood harvested in violation of traditional and civil rights
- No wood harvested in forests where high conservation values are threatened by forest management activities
- No wood harvested in forests being converted to plantations
- No wood harvested in forests where genetically modified trees are planted

Our customers—and their customers, the ultimate users of these products, want to know that they are making well-informed buying choices, and living in a way that puts less stress on the Earth. So in addition to the minimum standards described above, we give preference to companies who can supply us with fibre that originates in forest operations that are certified as being sustainably managed under one of the three main forestry certification standards (see sidebar "Forestry Certification" on the opposite page).



### CHAIN OF CUSTODY

Companies who buy our pulp or paper and use them to make their own products are also concerned about the environmental footprint made by their choices, and this concern is growing. Chain of custody and product labeling refer to the ability to track wood and wood fibre products through all phases of ownership, processing and transportation, from the forest of origin to the ultimate consumer, whether the products are lumber, pulp or paper. The integrity of the chain is verified through an independent third-party audit, and these procedures are required in all forestry certification programs. During 2010, 70% of the pulp that we sold was sold under the PEFC Chain of Custody system and 100% was eligible for sale under the FSC Controlled Wood system. We are also actively encouraging our suppliers to adopt FSC Forest Management procedures. As the BC version of the FSC standard is proving very difficult to apply in BC, especially in areas affected by mountain pine beetle, fibre that meets this certification is not yet available in the region from which we source our fibre. In 2011 we expect to be working with other forest stakeholders in the development of a new standard that better reflects the forest conditions throughout BC. We have established a goal to steadily increase the volume of fibre we get from all certified sources. Our target is to be obtaining 85% of our fibre from certified sources by 2014.





## FORESTRY CERTIFICATION

Independent forest certification provides a stamp of approval showing customers they are buying products from forests managed to comprehensive environmental, social, and economic standards.

A certificate is issued only after a thorough review by independent, third-party auditors determines, among other things, that long-term harvests are sustainable, there is no unauthorized or illegal logging, wildlife habitat is preserved, and soil quality is maintained.

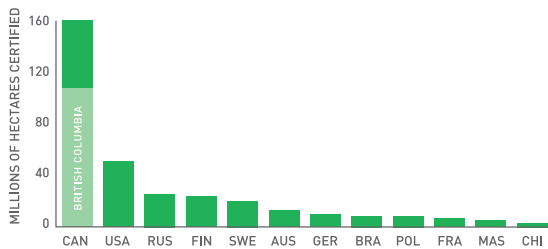
At CPLP we encourage our suppliers to adopt one of the following internationally recognized standards: The Canadian Standards Association (CSA), The Forest Stewardship Council (FSC), or the Sustainable Forestry Initiative® (SFI).

All three of these programs set high thresholds that forest companies must clear, above and beyond British Columbia's already tough regulatory requirements, if they wish to be certified. Moreover, they are tailored to take into account global forestry issues as well as circumstances specific to the Canadian landscape such as the livelihood of local communities and the interests of Aboriginal people.

The Canadian forest industry was an early adopter of forestry certification with the result that over 40% of all the certified forest land in the world today is in Canada and the majority of that is in BC. The growth in certification is illustrated below.

Unfortunately, despite well over a decade of activity, many regions of the world, especially the tropical regions, have not seen widespread adoption of credible certification systems. The tragic result is that in 2010 only 10% of all the world's forests had been certified under any system. Forest clearance and unsustainable practices continue in many parts of the world with negative impacts for climate change, biodiversity loss, impoverishment of communities and a host of other impacts with serious local and global consequences.

### CANADA CERTIFICATION IN THE GLOBAL CONTEXT 2010 Year-end – All Systems



### SFM CERTIFICATION IN CANADA 1999 – 2010

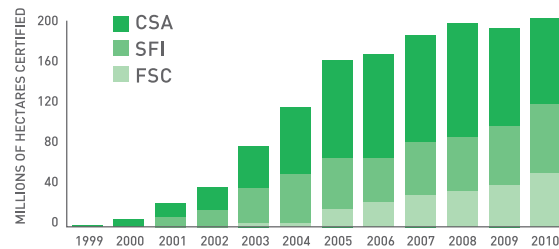


Photo credit: Forest Products Association of Canada

## THE PULP & PAPER VALUE CHAIN



### CERTIFICATION STANDARDS

- CSA — Canada's National Sustainable Forest Management Standard (CAN/CSAZ809-02)
- SFI — the Sustainable Forestry Board's Sustainable Forestry Initiative® Program
- FSC — the Forest Stewardship Council's Principles & Criteria and/or Standards

The CSA, FSC and SFI forest certification programs were developed for specific circumstances and needs, they are similar but do have differences. The legal framework within which standards are applied has also influenced them. CSA is only applied in Canada, largely on government-owned forest lands, and was written to complement tough policies, guidelines and government oversight already in place for the public forestlands in Canada.

FSC was established as a response to concerns over global deforestation and is applied on public or private lands, large or small, worldwide. It includes requirements that may not already be in place in developing countries lacking a strong environmental and social framework.

SFI is applied in Canada and the United States on both public and private lands and its requirements for North America recognize the strong legal framework in place there. It incorporates outreach and training requirements for suppliers of wood bought from non-program participants.

The standards have evolved over time, just as the definition of sustainable forest management itself has. They remain current and relevant through regular standard reviews that accommodate new science and changing public views, and on many fronts there has been convergence over time.

All three of the standards promote responsible forest management through the conservation of biological diversity, maintenance of wildlife habitat and species diversity, protection of special sites, soil and water, and sustainable harvest levels. Forests are protected from illegal logging, laws and rights are observed, input is obtained from multiple stakeholders, there is public reporting, and audits by independent third parties are required.



### THE PULP & PAPER VALUE CHAIN

CPLP receives roughly 2/3 of its fibre needs from CFP. It receives the balance through fibre supply agreements with other firms.

When sawmills are less active, as they were recently, CPLP sometimes needs to source whole logs from these same suppliers, but this is a minority of supply and our preference is always for sawmill residual chips, which do produce superior pulp and paper.

[Figure 1]

This fibre resource consists largely of chips from white spruce (*Picea glauca*), lodgepole pine (*Pinus contorta*) and sub-alpine fir (*Abies lasiocarpa*). Adapting to the harsh climate in the region, these species naturally develop long, slender and thin-walled cellulose fibres which make them especially valuable for high-quality, lightweight printing papers, premium tissue and high-strength, thin specialty papers, packaging and laminates.

We select the sawmills from which we source wood chips for the availability of premium fibre quality and for the proximity to our three pulp mills, allowing for eco-efficient transportation. Long term fibre supply agreements and market pricing formula ensure stability of supply.

Approximately 47% by weight of the sawmill chips which we receive are converted into high-quality white pulp fibres. Extracting this fibre efficiently while retaining its long, strong reinforcing qualities is the primary purpose of our pulping operations. The remaining constituents of the wood – lignin, hemicelluloses and other organic materials – are not wasted; they are converted into carbon-neutral energy that powers the process of separating them from the cellulose fibres in a remarkably efficient process known as the Kraft Pulping Process.

**THE FOREST PRODUCTS CHAIN**  
Wood, Pulp and Biomass Energy Flows

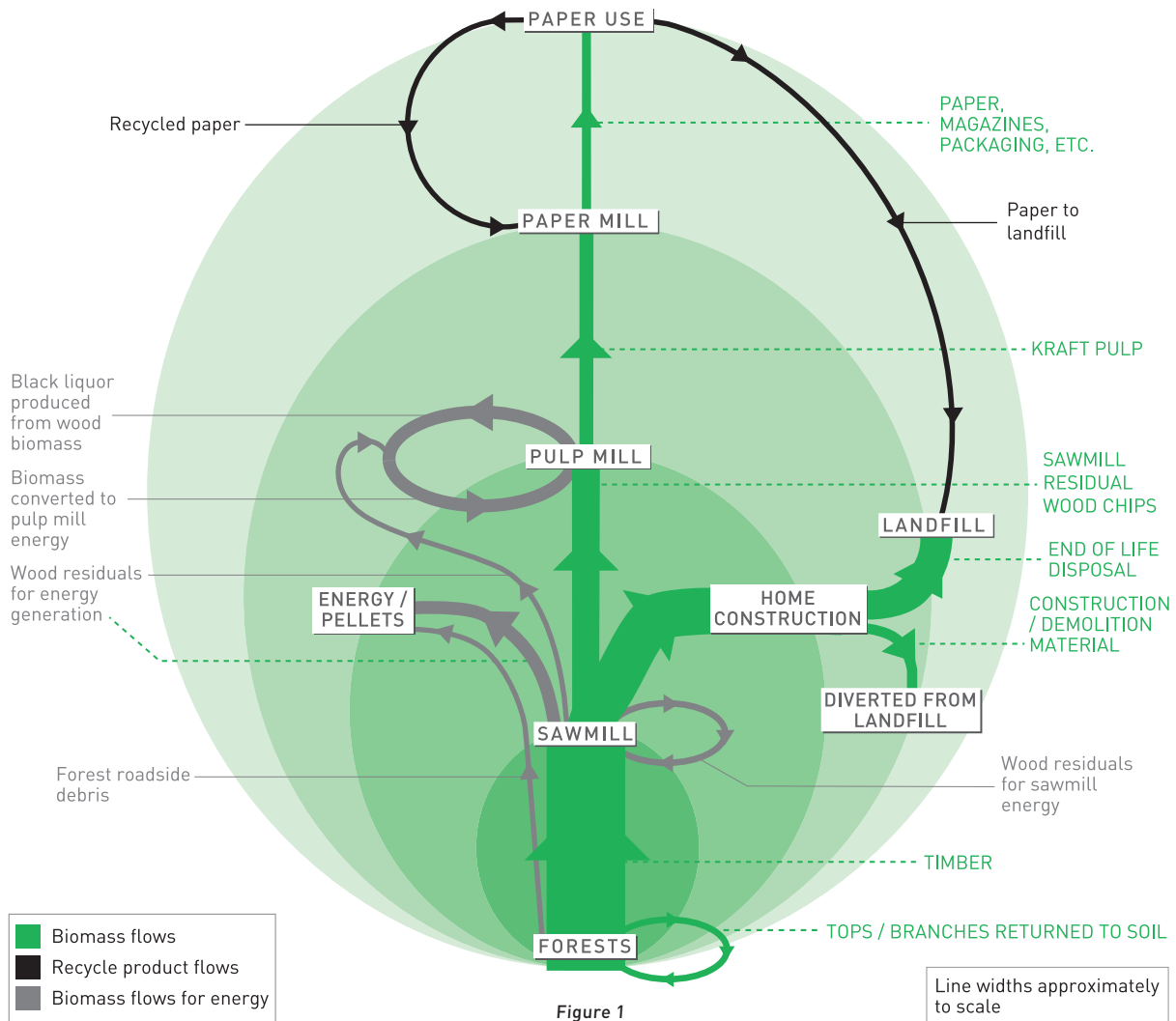


Figure 1

The forest products chain is an extremely eco-efficient process. Virtually all of the material harvested from the forest is used and/or reused. Branches and needles, (the most valuable parts of the tree for their nutrient value), are returned to the forest soil; bark and other wood residuals are efficiently combusted to make electricity or processed into wood pellets for energy systems; logs are sawn into lumber; and the wood chips and other residual material from that process are used to produce not only pulp and paper but also the very energy that drives the pulp production process.

The parts of the chain where there still remains a significant opportunity for improvement are the construction and demolition stages for solid wood products. Land-filling of wood or paper produces a very significant amount of carbon dioxide or the potent greenhouse gas, methane. The industry fully supports efforts to increase recycling efforts of wood and paper products.



## PULPING



The Kraft process draws its name from a German word for strong. Not only does the Kraft process produce valuable strong fibres, it does so in a remarkably efficient manner. A modern Kraft pulp mill operates as a large-scale bio-refinery that separates fibres from one another, using the non-fibrous component as fuel. It is a process that closely approaches the efficient closed loop systems of nature. By-products of one part of the process become the fuel or raw material of another. [Figure 1] The process produces both pulp and “green” energy.

### WHAT DOES “CARBON NEUTRAL” MEAN?

A product or a process can claim to be “Carbon Neutral” when it does not add more carbon dioxide to the atmosphere. Forest biomass used in pulp or wood production is generally considered to be “Carbon Neutral” since it absorbed carbon dioxide by photosynthesis while the tree grew, then when it decomposes or is burnt, either directly or after conversion to a biofuel such as black liquor, it releases the carbon dioxide back into the atmosphere where it re-enters the natural biogenic cycle.

CPLP is a member of CO2Neutral Alliance, an organization dedicated to encouraging progressive action on climate change throughout the entire forest products value chain. The target is for the entire Canadian forest products chain to achieve industry-wide carbon-neutrality by 2015 without the purchase of carbon-offset credits – a world first.

The CO2Neutral Alliance is supported by WWF Canada and the Forest Products Association of Canada (FPAC). FPAC and WWF-Canada have also agreed to use this partnership to leverage broader uptake within the forest industry, across the forest product value chain and in other sectors.

For more information go to [www.fpac.ca/index.php/en/fpac-and-wwf-agreement/](http://www.fpac.ca/index.php/en/fpac-and-wwf-agreement/).



The residual chips from local sawmills are fed into a large pressure vessel known as a digester where they are mixed with “white liquor,” a combination of two inorganic chemicals, sodium hydroxide (caustic soda) and sodium sulphide. Under pressure and at high temperatures the lignin that binds the fibres together is dissolved into the liquor, which becomes “black liquor,” separating the pulp fibres, resulting in a strong, dark brown cellulose pulp.



While the brown pulp goes on to the bleaching process, lignin-rich black liquor is then concentrated and fed to a recovery boiler where it is burned, producing steam and generating electricity. The lignin and other organic material that is extracted from the fibre furnishes a potent and completely renewable, carbon-neutral fuel that is burned to generate energy and reduce the need to purchase electrical power or burn fossil fuels. The recovery boiler recovers not only energy, but also the chemicals, which are then reused. Overall very little material is lost from the system, and there can actually be a surplus of energy generated. We have not yet achieved this net energy dividend at our mills, but our strategic investments are pushing us ever closer.



## BLEACHING



The strong, dark-brown cellulose pulp produced in the digester has lost most but not all of its lignin. If the cooking process were to continue to remove these last traces, some of the strength of the fibre would be lost, reducing the reinforcing properties of our pulp which are among its most prized qualities. At this point the fibres are at their strongest, but the pulp is still quite dark. Some applications – such as super-strong paper sacks, electrical transformers and manila envelopes – can make use of brown pulp, but most printing papers and other premium papers require a white furnish. So to realise the most value, we seek the most eco-efficient way to brighten the product, further removing lignin and impurities. At one time, elemental chlorine was used in bleaching, but this was found to be producing persistent, toxic by-products and its use was discontinued. CPLP employs an Elemental Chlorine Free process (ECF) using combinations of oxygen, hydrogen peroxide and chlorine dioxide. Over the past two decades, the ECF process has become the preferred and dominant bleaching system for pulp worldwide.

We track the efficiency of the Pulping and Bleaching stages by carefully monitoring the critical characteristics of the effluent, such as temperature, organic and inorganic content. These emissions to the river are actually losses from our system, and hence represent inefficiencies in our processes as well as being environmental burdens. Our goal is always to reduce or eliminate such losses. Where ecology and economy come together, sustainability becomes not only possible, but powerful. As our Sustainable Enterprise strategy is implemented during 2011, we will be developing a new set of metrics to allow us to track and report on our performance in these areas.



## SIGNIFICANT CAPITAL INVESTMENTS TO IMPROVE OUR ENVIRONMENTAL PERFORMANCE

During 2011, CPLP will be undertaking a number of projects that will have a direct impact on the local environment and the community. These projects will improve the environmental performance, reduce emissions, advance the energy efficiency, and increase the renewable power generation of our Prince George operations. The following projects will receive significant funding from the Federal Government Pulp and Paper Green Transformation Program (see sidebar on opposite page):



### PRINCE GEORGE PULP MILL ODOUR REDUCTION PROJECT

This is projected to reduce the intensity and frequency of odour events by 60% from today's levels, or 90% relative to the levels in the 1980s. Start up is planned for spring 2011.



### INCREASED BIOFUEL POWER GENERATION PROJECT

We are always looking for ways to use resources more efficiently and this project will allow us to optimize the balance of fibre and liquor between the Prince George and Intercon mills. When fully implemented we expect to generate an additional 4,500 MWh of electrical power per year through the existing steam driven turbo-generator, thus significantly increasing "green" power generation from the site and reducing the generation of greenhouse gases. Start up occurred in December 2010.



### NORTHWOOD PULP MILL GREEN TRANSFORMATION PROJECT

This is the largest project we are undertaking this year. It represents a fundamental improvement to the Northwood Pulp Mill. The project will upgrade several systems associated with the #1 Recovery Boiler process, bringing them to 'Best Achievable Technology' levels. A key environmental benefit of the project will be an estimated reduction of odourous Total Reduced Sulphur (TRS) compounds from this source by 70% from current levels.



This project will also have a number of other important environmental benefits, including a 50% reduction of particulate emissions from the #1 Recovery Boiler. This is expected to start up in the fall of 2011.



### PRINCE GEORGE PULP MILL GREEN TRANSFORMATION PROJECT

The Prince George Mills Green Transformation Project involves the following upgrades:



#### #1 Power Boiler Precipitator



Installation of a new Electrostatic Precipitator to process the flue gas from the boiler will reduce particulate emissions and thus enable the boiler to run more efficiently, generating more steam from biomass. This steam will be used to generate additional carbon-neutral power from the Prince George Pulp Mill turbo generator. The amount of power we will generate would run roughly 800 typical North American homes for a year. In addition, particulate emissions are expected to be reduced by approximately 70%, resulting in improved air quality in Prince George. Start up is planned for 2012.



#### Prince George Pulp Mill Boiler Feed Water System



By upgrading the Boiler Feed Water System, this project will significantly reduce boiler blow down rates (from the current average of 8% down to 1.5%) and reduce the volume of water we take from the Nechako river. This will result in an improved energy efficiency and a significant improvement in water quality.

Taken together, these projects represent an investment of more than \$158 million to realise improvements in energy efficiency, odour reduction, and particulate reduction. \$122 million in funding will be reimbursed by Natural Resources Canada under the Pulp and Paper Green Transformation Program. CPLP is investing the additional \$36 million to ensure that Best Available Technology is fully implemented to meet or exceed today's standards and fully meet tomorrow's. While all of these projects would in time have been implemented, even without the support of the Federal program, (indeed some were already underway), the program has permitted us to implement them in a far more rapid time frame, thus accelerating their environmental benefits while providing an economic stimulus to the local and national economies.

# GREENHOUSE GAS REDUCTIONS



## CONTINUING OUR TRADITION OF LOWERING EMISSIONS

CPLP has invested heavily to reduce greenhouse gas (GHG) emissions at mill operations, all the while maintaining or increasing levels of production. A culture of continuous improvement has played a role in these achievements. At all three mills there has been an ongoing effort to increase the use of carbon-neutral biofuels in the form of “hog” fuel. This has led directly to a significantly reduced dependence on natural gas and other fossil fuels. There have been a number of boiler and energy cogeneration capital projects through the past decade that have directly reduced GHG emissions. In the table below we use 1990 as the reference year as this was the baseline year defined in the Kyoto Protocol. The Canadian commitment under Kyoto was to achieve a reduction of 6% in the absolute level of the country’s 1990 GHG emissions by 2012. As the table shows, CPLP has been successful in achieving GHG emissions reductions that far exceed the Kyoto target. The Canadian forest products industry as a whole has been able to make similar levels of GHG reduction, contributing significantly to Canada’s overall GHG reduction efforts. ([www.fpac.ca/index.php/en/sustainable-solutions/](http://www.fpac.ca/index.php/en/sustainable-solutions/))

The trends in our natural gas consumption and GHG emissions are shown in the graph to the right. Improvements have been leveling off in recent years. This is because the major opportunities to improve efficiency have already been implemented. Nevertheless, opportunities do still exist at our mills and we have projects planned to take advantage of them. We will be reporting on the progress at all of our mills annually.

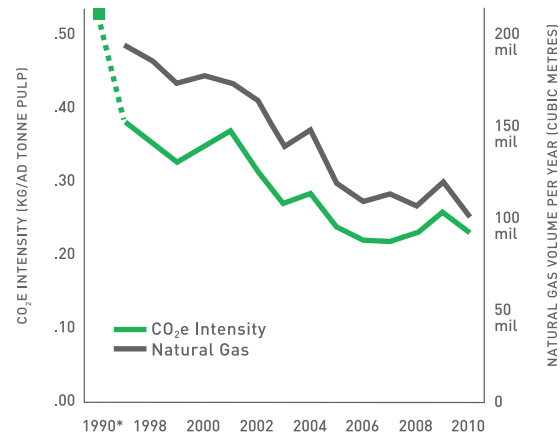
### REDUCTIONS IN GHG EMISSIONS SINCE 1990

	Absolute Basis	Intensity Basis*
Canadian Target	6%	—
Prince George Mill	60%	68%
Intercon Mill	31%	56%
Northwood Mill	46%	63%

\* NB “Intensity basis” means emissions per tonne of pulp or paper produced

## NATURAL GAS CONSUMPTION

Canfor Pulp — All Mills



### PULP AND PAPER’S GREEN TRANSFORMATION PROGRAM

In the fall of 2009 Natural Resources Canada launched the Pulp and Paper Green Transformation Program. Intended to stimulate innovation in Canada’s pulp and paper sector and lay the groundwork for a “greener,” more sustainable future, the program supports innovation and environmentally friendly investments in areas such as energy efficiency, renewable energy production or reduced emissions to air or water.

Eligible firms who invest in approved capital projects that offer demonstrable environmental benefits, can be reimbursed for their investments through this program, provided the projects are completed by March 31, 2012.

As expressed by Natural Resources Canada on their website, “By making a smart investment today, Canada is laying the groundwork for a greener, more secure future for the pulp and paper sector and the people who work in the industry.” ([cfs.nrcan.gc.ca/subsite/pulp-paper-green-transformation](http://cfs.nrcan.gc.ca/subsite/pulp-paper-green-transformation))

For more information go to [www.fpac.ca/index.php/en/fpac-and-wwf-agreement/](http://www.fpac.ca/index.php/en/fpac-and-wwf-agreement/).



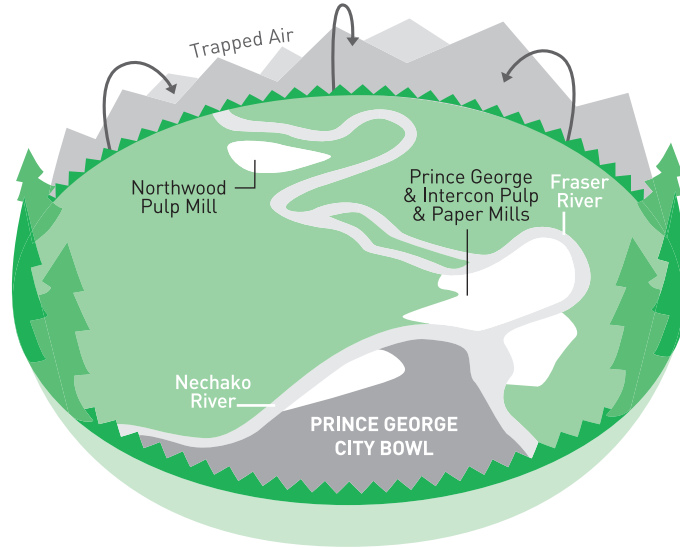
## THE PRINCE GEORGE AIRSHED

The city of Prince George is located in a bowl-shaped basin at the confluence of the Fraser and Nechako Rivers. This natural landform greatly influences our airshed and significantly increases the challenges in maintaining air quality in the region. Temperature inversions within this bowl can create extended periods during which the air is trapped and emissions accumulate, resulting in diminished air quality. Within the airshed the two most significant kinds of contaminants in these conditions are particulates (smoke, dust, etc) and odour (mainly Total Reduced Sulphur).

CPLP mills have been active in Airshed Management since they were built in the 1960s. In addition to seeking ways to reduce emissions, we have provided funding for a community monitoring system and support for research to find effective solutions. Research and monitoring are essential elements of any effective strategy, because good science is essential to improving air quality.

Most recently CPLP has launched several major capital improvements that will measurably improve air quality in Prince George. [For specific details of these projects please refer to the Significant Capital Investments section of this report, pp12.]

### PRINCE GEORGE



### ODOUR (TOTAL REDUCED SULPHUR)

Total Reduced Sulphur (TRS) refers to a number of sulphurous compounds which are detected by people as a “rotten egg” smell. While these compounds in the air are not normally considered to have adverse effects on human health or the environment, the human nose can detect them at extremely low levels of concentration. The smell is unpleasant and adversely affects the quality of life in the community.

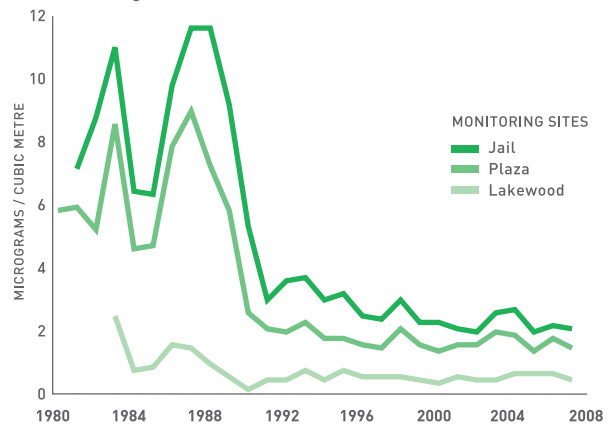
A variety of natural and industrial sources of TRS exist in the Prince George area. Identifying and quantifying the source of emissions is thus clearly an important part of any efforts to make a real difference in improving air quality. Our experience in Prince George vividly demonstrates that efforts to reduce emissions must be based on quality research and sound science.

In the 1980s, working largely from an intuitive assumption that air quality would be most affected by stack emissions, the Prince George mills engaged in an extensive effort to reduce emissions from pulp mill stacks, however levels of TRS in the airshed were not significantly improved.

We then turned to science and a research-based

### PRINCE GEORGE AIR QUALITY

Annual average ambient TRS





approach that took a closer look at emission sources and discovered that the dominant sources of odour were actually low-level emissions coming from our water treatment systems. Armed with this new information, the three mills added systems to remove odour compounds from water streams prior to treatment. This resulted in a very significant reduction in local odour throughout the community, as shown in the chart on the opposite page.

The price for not putting science first had been huge, not only in financial terms but in the ten years that were lost before effective results were achieved. Today, working with better and better information, we believe that our work on odour control is becoming more and more effective.

In January 2007 CPLP initiated a study to identify ways to further reduce local odour. Working with FPInnovations Paprican, a globally respected partner in forest industry research, we carefully tested and inventoried emission sources and modeled their contribution to local odour. That study revealed that a single project at the Prince George pulp mill would reduce pulp mill odour in downtown Prince George by 60%. Already on the fast track, that project has now been expedited further by the Pulp and Paper Green Transformation Program. It will come online in the spring of 2011. Additionally, the Recovery Boiler upgrade at the Northwood pulp mill will address the next single largest odour emission source. [For specific details of these projects please refer to the Significant Capital Investments section of this report, pp12.]



#### FINE PARTICULATE

Pollution in the form of particles suspended in the airshed is more serious from a health standpoint than TRS. In Prince George the sources of fine particulate include emissions from industry, wood stoves, restaurants, forest fires and railway locomotives, with the major source being road dust. The sheer number and diversity of these sources make particulate levels an especially complex issue to manage.

At one time a major source of particulate emissions was the “beehive burners” used to dispose of what was then regarded as “waste” wood from the sawmills in the region. Today these burners have all been eliminated and wood fibre that once would not only have been wasted but would have been contributing to pollution is now generating biomass energy (steam and electricity) in an eco-efficient manner.

The upgrade currently in progress on the Northwood Recovery Boiler will reduce emissions of fine particulate from that source by 50%. Upgrades planned for the #1 Power Boiler Precipitator at the Prince George pulp mill will reduce particulate emissions from this source by 70%. [For specific details of these projects please refer to the Significant Capital Investments section of this report, pp12.]



#### ONGOING RESEARCH

Reducing emissions from pulp mill stacks will not solve all air quality problems in Prince George. Canfor Pulp fully supports a rigorous science-based approach to fully understand a highly complex air quality situation involving literally thousands of possible sources throughout the region. The challenge is to confirm the sources and systems in order to pinpoint the most effective actions to ensure that everyone in our region gets cleaner air, and sooner.

Our commitment to eco-efficiency calls for excellence in environmental performance across the company and within the communities in which we operate. So, in 2011, we are again working with FPInnovations to monitor air quality in the community, both before and after the implementation of the odour and particulate projects. We will of course be sharing the results of the monitoring with the citizens of Prince George.

Together with the Ministry of Environment, industry and other stakeholders, the Prince George community is taking bold and effective measures toward improving air quality. We are proud to be part of a program that will establish Prince George as a leader in Airshed Management.

# SOCIAL RESPONSIBILITY



## SOCIAL WELLBEING

In any sustainable enterprise, social and personal contributions are inseparable from economic and environmental performance. Globally, CPLP strives to be an ethical and accountable good corporate citizen.



Closer to home, CPLP employs approximately 1159 employees directly, most of whom work at our three pulp and paper mills in Prince George, BC, with a relatively small staff in our Vancouver offices. The mills in Prince George are unionized with 74% of the workforce being represented by two unions, Communication, Energy and Paperworkers of Canada (CEP) and the Pulp, Paper and Woodworkers of Canada (PPWC). The rest of the workforce comprises employees performing Managerial, Professional, Technical, and Administration functions.



CPLP also provides employment to several hundred temporary employees and contractors during its annual maintenance operations. In 2010, CPLP also provided employment for 41 summer students and 12 co-op students. Student programs provide an opportunity for young people to gain work experience in an industrialized work environment while pursuing their education.

We strive to be the employer of choice in our communities and within our industry, both for the men and women who currently work in our company and for those seeking to join a progressive and successful organization.



## SAFETY

People are of course our most essential resource. The safety and wellbeing of those who make the mills run is our #1 concern. Our operations have well developed safety programs and active Occupation Health and Safety Committees which focus on continual improvement to eliminate workplace incidents. In 2010 CPLP achieved a medical incident rate (MIR) of 2.32 which is our second best safety performance ever.

## MEDICAL INCIDENT RATE

Per 200,000 hours worked





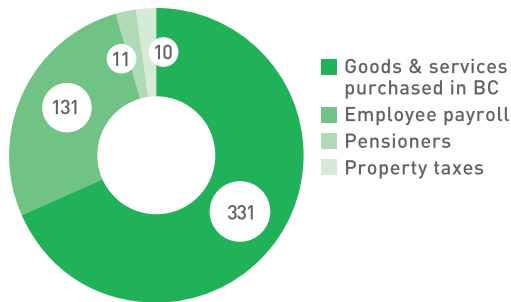
### DIRECT ECONOMIC CONTRIBUTIONS

CPLP directly contributed nearly half a billion dollars to the British Columbia economy in 2010. This contribution is especially significant in the Prince George region but the effect is much broader as our employees and the many companies that support our mills come from all over the region. Our property tax contributions help to support schools, parks, emergency services, health care, and other important programs.

CPLP ECONOMIC BENEFITS TO BC	
Employee Payroll	\$131,019,584
Pensioners	\$10,909,309
Property taxes	\$9,811,760
Goods and services purchased in BC	\$330,573,191
	<b>\$482,313,844</b>

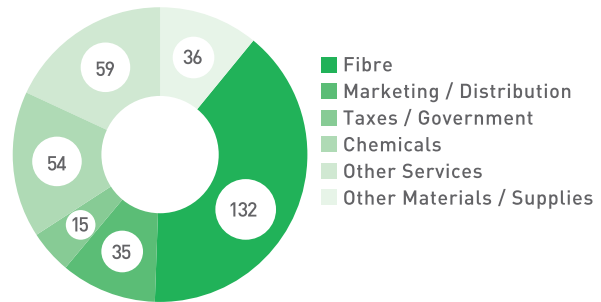
### CPLP ECONOMIC BENEFITS TO BC

Dollars, in millions



### BREAKDOWN OF GOODS AND SERVICES PURCHASED IN BC

Dollars, in millions



### COMMUNITY ENGAGEMENT

In addition to direct economic activity, CPLP actively works to support community goals wherever we do business. We support communities through scholarships, support for non-profit societies, youth groups, community centers, health care initiatives, and in many other ways.

CPLP has been a strong supporter of education over the years and we contribute to regional and provincial colleges, universities, and trade and technical schools. In 2010, CPLP partnered with School District #57 and the College of New Caledonia to sponsor 16 students in the Career Technical Center (CTC) program. This innovative program provides high school students in grade 11 and 12 with an opportunity to pursue their first-year apprenticeship in the trade of their choice, while completing their high school graduation. During their work experience at CPLP the CTC students worked alongside tradesmen, and gained "hands-on" experience of their chosen trade.

We have provided ongoing support to the Charles Jago Northern Sports Center at the University of Northern British Columbia (UNBC). This high-performance sport, recreation and fitness facility, named for the University's first President, is one of the largest of its kind in British Columbia and home to the province's longest indoor track. In addition to housing varsity sports and training at an elite level, the facility is open to the community, is home to major tournaments and events, and offers enhanced sport medicine services.

Our employees also take community support personally, and actively participate in programs such as United Way campaigns, Terry Fox runs and many other regional and local charitable initiatives.

## CREATING SUSTAINABLE VALUE

CPLP's ongoing efforts to improve environmental performance not only benefit the company and the environment, they also generate additional revenue in various ways, some of which are outlined below.



### FIRST AND FOREMOST A SUSTAINABLE BUSINESS

2010 was a record year for CPLP, solidifying our position as a sound investment, a secure employer, and a reliable partner. Among the business highlights for 2010 were:



### 2010 HIGHLIGHTS

- CPLP achieved record sales of \$1.0 billion and generated record EBITDA (earnings before interest, taxes, depreciation, and amortization) of \$230.0 million.
- We distributed \$183.9 million to unit holders, or \$2.58 per Partnership unit.
- We achieved a record average total daily production rate.
- We generated \$5.4 million in energy sales to BC Hydro, under the terms of its Energy Purchase Agreement.



## SELECTED ANNUAL INFORMATION

(millions of dollars except volumes and per unit amounts, unaudited)

	2010	2009	2008
<b>Sales volume - major products</b>			
Pulp – thousands of metric tonnes	1,039.0	1,044.6	905.4
Paper – thousands of metric tonnes	144.7	135.0	124.8
<b>Sales by segment (\$)</b>			
Pulp	857.2	690.0	695.2
Paper	142.6	122.5	130.3
Unallocated	1.3	1.0	-
<b>Total sales</b>	<b>1,001.1</b>	<b>813.5</b>	<b>825.5</b>
<b>Total operating income (\$)</b>	<b>182.7</b>	<b>12.0</b>	<b>68.7</b>
<b>Total EBITDA (\$)</b>	<b>230.0</b>	<b>61.8</b>	<b>116.9</b>
<b>Net income (\$)</b>	<b>178.0</b>	<b>13.4</b>	<b>46.8</b>
Net income per Partnership unit, basic and diluted (\$)	2.50	0.19	0.66

CPLP's three pulp and paper mills in Prince George have an annual capacity to produce more than one million tonnes of northern softwood market kraft pulp (90% of which is bleached to become NBSK pulp for sale to the market) and approximately 140,000 tonnes of kraft paper. All the mills are located in close proximity to one another providing significant operating synergies and efficiencies of fibre supply for the company and the community.

For full details on the performance of the company please refer to our Annual Report, available as a .PDF document from [www.canforpulp.com](http://www.canforpulp.com).



### CARBON CREDITS

British Columbia remains one of the few jurisdictions in North America with a legislated carbon trading system in place. Regulations require that any reductions claimed are indeed 1) an improvement over reductions that would have occurred without offset revenue, 2) that they are permanent, and 3) that the offsets are counted only once. At present four Canfor Pulp projects have been identified that can satisfy all requirements and will reduce greenhouse gas emissions by about 40,000 tonnes per year. We have a contract in place to supply these carbon offsets to Pacific Carbon Trust, a BC crown corporation tasked to help the provincial government achieve a goal of carbon neutrality. First sales of carbon credits are anticipated in early 2011.



### MEASURING SUSTAINABLE VALUE

Traditionally, the sustainability trends of an enterprise have been measured by tracking the levels of emissions per tonne of production, or the volume of wood harvested per tonne of pulp made. These metrics address the environmental "burden", but the true costs of the impacts and resulting benefits have often been hard to quantify in dollar terms. Further, using traditional approaches, environmentally driven projects such as the Odour Reduction Project, now well underway at the Prince George mill, were sometimes difficult to justify because their economic returns were quite low, yet they were clearly the right things to be doing. So in order to help evaluate projects with benefits to our overall sustainability or to rank existing environmental impacts, CPLP has embarked on a project with the University of Northern British Columbia. Our goal is to develop an approach that will better enable us to measure not just environmental impacts but also the sustainable value that our activities generate. We expect to be reporting on this during 2011.

## LOOKING FORWARD

The unification of environmental and economic efficiency has always been a strong driver for the pulp and paper business, and our Sustainable Enterprise initiatives build upon a foundation that has long been present in our industry. That said, the increased emphasis on eco-efficiency throughout all aspects of our operation is quite new and what you have read in this supplement is very much a work in progress. In the coming year we will be establishing comprehensive metrics to evaluate our performance and track our improvements. We will publish our first full Sustainability Report for 2011, early in 2012.

This is an exciting time for our business and one that offers considerable opportunity for economic, environmental and social action. We recognize that a truly sustainable enterprise is deeply linked to all stakeholders and we warmly invite your suggestions and ideas either on this Sustainability Supplement or about Canfor Pulp Limited Partnership (CPLP).

Please visit: [www.canforpulp.com/sustainability](http://www.canforpulp.com/sustainability).

Thank you.



**MICHAEL BRADLEY**  
Director, Sustainable Enterprise  
Canfor Pulp Limited Partnership



**JOE NEMETH**  
Chief Executive Officer,  
Canfor Pulp Limited Partnership







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FOR MORE INFORMATION ON HOW WE'RE CREATING MORE VALUE WITH LESS IMPACT,  
VISIT [CANFORPULP.COM](http://CANFORPULP.COM).