

PERFORMANCE REPORT ON THE 2010–2012 SUSTAINABLE DEVELOPMENT PLAN





TABLE OF CONTENTS

OVERVIEW OF THE COMPANY	2010–2012 SUSTAINABLE DEVELOPMENT HIGHLIGHTS	2010–2012 ENVIRONMENTAL HIGHLIGHTS	2010-2012 ECONOMIC HIGHLIGHTS	2010-2012 SOCIAL HIGHLIGHTS	MESSAGE FROM MANAGEMENT
P. 5	P. 9	P. 11	P. 13	P. 15	P. 18
CASCADES' STAKEHOLDERS	MATERIALITY ANALYSIS	PERFORMANCE REPORT ON THE 2010–2012 SUSTAINABLE DEVELOPMENT PLAN	RESULTS FOR THE 18 STRATEGIC CHALLENGES SET FOR 2010-2012	GOVERNANCE	AWARDS AND DISTINCTIONS
P. 20	P. 21	P. 23	P. 25	P. 73	P. 74

IN THIS REPORT, "COMPANY" OR "CORPORATION" OR "CASCADES" OR "ENTERRISE" MEANS CASCADES INC. AND, WHERE THE CONTEXT REQUIRES, ONE OR MORE OF ITS SUBSIDIARIES, DIVISIONS AND JOINT VENTURES.



ACHIEVED CHALLENGE NOT ACHIEVED

LEGEND



ABOUT CASCADES

FOUNDED IN 1964, CASCADES MANUFACTURES, CONVERTS, AND MARKETS PACKAGING AND PAPER PRODUCTS COMPOSED PRIMARILY OF RECYCLED FIBRES. CASCADES EMPLOYS MORE THAN 12,000 WOMEN AND MEN WHO WORK IN OVER 100 OPERATING UNITS IN NORTH AMERICA AND EUROPE. THE COMPANY'S MANAGEMENT PHILOSOPHY, NEARLY HALF A CENTURY OF EXPERIENCE IN RECYCLING, AND CONTINUOUS EFFORTS IN RESEARCH AND DEVELOPMENT ARE DRIVING FORCES ENABLING IT TO DEVELOP INNOVATIVE PRODUCTS FOR ITS CUSTOMERS. CASCADES' SHARES TRADE ON THE TORONTO STOCK EXCHANGE UNDER THE CAS TICKER SYMBOL.



30 MANUFACTURING PLANTS² 58 CONVERTING $PI ANTS^2$ 2 DE-INKED PULP PLANTS 23 RECOVERY CENTRES MORF THAN 12,000 **EMPLOYEES**

NUMBER OF

COUNTRIES

WHERE OUR UNITS ARE LOCATED

ITALY

SPAIN

GERMANY

SWEDEN

OVERVIEW OF THE COMPANY

1. AT DECEMBER 31, 2012.

CONVERTING PLANTS

2.7 INTEGRATED MANUFACTURING AND

CASCADES NOW HOLDS 57.61%.

P. 6

TOP RANKING

OVERVIEW OF THE COMPANY

P. 7

CASCADES IS THE TOP SELLING GREEN BRAND IN CANADA FOR THE BATHROOM TISSUE AND THE PAPER TOWEL CATEGORIES, ACCORDING TO THE LATEST NIELSEN DATA



THE SOLE PRODUCER OF FINE PAPERS MADE FROM 100% RECYCLED FIBRES IN CANADA

The largest producer of containerboard in Canada AND 5TH IN NORTH AMERICA^{2,3} The largest producer of recycled boxboard in Canada AND **4**TH IN NORTH AMERICA^{2,3} The largest collector of wastepaper and cardboard in Canada AND **5TH** IN NORTH AMERICA^{2,3}

ONE OF THE LARGEST MANUFACTURERS OF POLYSTYRENE FOAM TRAYS



FOR CANADIAN FOOD PROCESSING AND RETAIL MARKETS³

CASCADES VIS-À-VIS THE INDUSTRY

AMONG THE BEST

hargest tissue paper producer in North America^{2,3} RD <u>largest consumer of</u> recycled fibres in North America^{2,3}



One of the leading producers of egg cartons in Canada^{2,3} . NIELSEN MARKETTRACK – NATIONAL – ALL SALES – ALL CHANNELS – LATEST 52 WEEKS ENDING SEPTEMBER 21, 2013

2. RISI, THE LEADING INFORMATION PROVIDER FOR THE GLOBAL FOREST PRODUCT INDUSTRY, 2012

3. REPORTS OF SIMILAR COMPANIES



2010-2012 SUSTAINABLE DEVELOPMENT HIGHLIGHTS

In terms of sustainable development challenges, the 2010 to 2012 period was marked by the following:1

ENVIRONMENT

MORE THAN 75 PROJECTS CARRIED OUT BY THE ENERGY ACTION GROUP (CASCADES GIE INC.), RESULTING IN SAVINGS EXCEEDING 770,000 GIGAJOULES

USE OF

SAVING

TREES

SHORT TONS

OF RECYCLED FIBRES

FOUN/ALENT

REDUCTION IN GREENHOUSE GAS EMISSION INTENSITY

5% RF

IN WA

ISCHAR

REDUCTION IN THE OSHA

SOCIAL

dollars in donations and sponsorships ECONOMY

1(0)

AN INCREASE IN SALES OF **15%**

MORE THAN PRODUCTS MARKETED

MORF THAN

IMPLEMENTATION OF AN ASSESSMENT PROCESS FOR SUPPLIERS' BUSINESS PRACTICES

1. DATA FROM THE CASCADES GROUP, INCLUDING ACTIVITIES IN EUROPE

2010-2012 SUSTAINABLE

DEVELOPMENT HIGHLIGHTS

P.9



OUR RAW MATERIAL CONSISTS OF NEARLY **80% RECYCLED FIBRES,** SAVING MILLIONS OF TREES EVERY YEAR.

2010–2012 ENVIRONMENTAL HIGHLIGHTS

P. **11**

FIBRE SUPPLY HIGHLIGHTS¹

This data includes procurement of Reno De Medici S.p.A.; not consolidated in 2010 and fully consolidated in 2011 and 2012 according to IFRS accounting standards.



1. DATA FROM THE CASCADES GROUP, INCLUDING ACTIVITIES IN EUROPE



OUR FINAL MATERIAL IS COMPOSED OF ENVIRONMENTALLY FRIENDLY PRODUCTS WITH UTMOST CONSIDERATION GIVEN TO ENVIRONMENTAL AND SOCIAL ISSUES.

2010-2012 ECONOMIC HIGHLIGHTS

1. SEE THE SECTION

REPORT AVAILABLE AT WWW.CASCADES.COM, PP. 18 AND 19

2. EXCLUDING SPECIFIC

ELEMENTS

"SUPPLEMENTAL INFORMATION ON NON-IFRS MEASURES" IN THE 2012 ANNUAL

P. 13

ECONOMIC HIGHLIGHTS

In millions of Canadian dollars, unless otherwise specified				BREAKDOWN OF SALES		
	2010	2011	2012	BY ACTIVITY SECTOR		
Sales	3,182	3,625	3,645	(percentage)		
Operating income before amortization (OIBA or EBITDA) ^{1, 2}	310	229	304	21 32 21 26		
Cash flow (adjusted) from operations ^{1, 2}	197	133	167			
Return on assets ^{1, 2}	10.6%	6.5%	8.1%	European Boxboard Containerboard Specialty Products Tissue Papers Group Group Group Group Group		
Return on capital used ^{1, 2}	3.8%	1.3%	2.8%	THE PACKAGING PRODUCTS SECTOR, WHICH INCLUDES: The European Boxboard Group, a manufacturer of premium coated boxboard		
SALE	SALES TO DESTINATION (%)		(%)	CASCADES CONDUCTS ITS BUSINESS		
	2010	2011	2012	PRINCIPALLY The Specialty Products Group, which manufactures specialty papers, industrial packaging, and consumer		
anada	41	40	38	- products packaging, and is also involved in recovery TWO OPERATING and recycling - SECTORS		
nited States	43	37	38	THE TISSUE PAPERS SECTOR, WHICH INCLUDES: operational units that manufacture and convert		
urope and elsewhere	16	23	24	tissue papers for the Away-from-Home and consumer products markets.		



OUR GREY MATTER CONSISTS OF **WOMEN AND MEN 100%** COMMITTED TO THE SAME GOAL: SUSTAINABILITY AT CASCADES.

2010–2012 SOCIAL HIGHLIGHTS

P. **15**

SOCIAL HIGHLIGHTS

WORKFORCE PROFILE				
	2010	2011	2012	
Total number of employees at the end of the period	12,389	12,147	12,031	
Average number of years of service	13.1	13.9	13.8	
Average age of employees	44	45	45	
Number of students hired	538	518	489	
Number of interns hired	128	126	122	

COMPENSATION					
(MILLION \$)					
	2010	2011	2012		
Gross wages	604	594	594		
Benefits	244	255	254		
Profit sharing	38	30	34		
Total compensation	886	879	882		

TRAINING				
	2010	2011	2012	
Number of hours of training	296,770	367,908	342,221	
Number of employees trained	8,613	8,981	8,632	
% of employees	58%	54%	58%	
Investments in training (Million \$)	11	12	11	
% of the total payroll	1.7%	1.9%	1.7%	

HE/	ALTH AN	ID SAF	ETY
	2010	2011	2012
OSHA incident rate*	4.9	4.3	3.8
(OSHA 1904) in workplace I Cascades has company's sta	cident rate is an that measures p nealth and safety adopted it as th andard for measu ce in health and on page 60.	performance y. he uring	dard

SOCIAL HIGHLIGHTS



1. IN 2010, THE DATA FROM RENO DE MEDICI WAS NOT TAKEN INTO ACCOUNT.

2010–2012 SOCIAL HIGHLIGHTS

CASCADES.COM/SUSTAINABLE-DEVELOPMENT

THE FOLLOWING PAGES PRESENT AN OVERVIEW OF OUR SUSTAINABLE DEVELOPMENT ACHIEVEMENTS DURING THE THREE-YEAR PERIOD FROM JANUARY 1, 2010 TO DECEMBER 31, 2012, WHICH CORRESPONDS TO THE PERIOD COVERED BY OUR FIRST FORMAL SUSTAINABLE DEVELOPMENT PLAN. A SECOND PLAN FOR 2013 TO 2015 HAS BEEN LAUNCHED TO PURSUE OUR COMMITMENTS. DETAILS MAY BE FOUND AT



AN ENRICHING FIRST EXPERIENCE

WITH A HISTORY OF ENVIRONMENTAL, SOCIAL, AND ECONOMIC COMMITMENT, CASCADES LAUNCHED ITS FIRST SUSTAINABLE DEVELOPMENT PLAN IN 2010. THE PLAN'S **18 OBJECTIVES** WERE ESTABLISHED AFTER CONSULTATION WITH STAKEHOLDERS IN 2009, A STEP WE VIEWED ESSENTIAL IN A TRANSPARENT SUSTAINABLE DEVELOPMENT APPROACH.

MESSAGE FROM MANAGEMENT

P. 19

MATERIAL FOR SUCCESS

Beyond the numbers, we would like to highlight efforts in several areas where Cascades has proven to be an avant-garde company. It has long been recognized as a pioneer in the recovery of waste paper and cardboard and in the manufacture of products made from recycled fibres. Our **environmental performance is enviable** from the perspectives of energy and water consumption and reuse of waste. Our plants are among the top performers, with an **average energy consumption that is 50% lower** than that of the industry, an **average water use that is 80% lower** than that of the industry and the **recycling of nearly 67%** of our papermaking waste.

Our leadership role has also made us aware of our power to influence and the positive impacts we have on the entire supply chain. This is why we recently introduced a **responsible pro-curement strategy**. We are convinced that we have launched a process that will ensure our suppliers are as committed to sustainable development as we are. The Sustainable Supplier Award, presented annually since 2009, recognizes companies that enable Cascades to remain at the forefront in offering environmentally friendly commodity products. Further more, several

life cycle assessments (LCAs) conducted in collaboration with university researchers and specialized firms have confirmed the environmental benefits of Cascades products. This is undoubtedly one of the reasons why **Quebecers regard our company as the most environmentally responsible.**¹

From a human perspective, our company has always invested in our most valuable resource—our employees, of whom we are very proud, and the reason for our success. Our 2010-2012 Sustainable Development Plan included social objectives that sought to improve the workplace quality of life of our employees and to involve them to a greater extent in our sustainable development strategy. The **health and safety** of our employees remains a priority, and the results show a **clear improvement** in this regard. True to our tradition, we continued to respect **our commitments in the communities** where our facilities are located. This resulted in donations of **more than \$10 million** over the past three years.

To carry out our leadership role, we gave ourselves the mandate of promoting sustainable development externally. In 2010, 2011, and 2012, we seized many opportunities to explain our approach and practices to the industry and to the public. As we did so, we listened to and cooperated with our stakeholders.

In short, these past three years have been a rich learning experience. Drawing from this experience, which has made us a better company, we are ready to implement the 2013-2015 Sustainable Development Plan. This new plan will enable us to further our sustainable development commitment by working on challenges that are more focused and more tangible.

With the above in mind, we encourage you to consult our **2010**-**2012 Performance Report**, and we invite you to continue contributing to our planning year after year.

fan Zmin

Alain Lemaire Executive Chairman of the Board

Mario Plourde President and Chief Executive Officer

1.2012 RESPONSIBLE CONSUMPTION INDEX, OBSERVATOIRE DE LA CONSOMMATION RESPONSABLE (ESG-UQÀM, UNIVERSITÉ DE SHERBROOKE), NOVEMBER 2012

OVERVIEW OF THE PHASES OF CASCADES' FIRST SUSTAINABLE DEVELOPMENT PLAN

OUR APPROACH

Employee	s Business customers	Product users	Suppliers	Other NGO/NPO representatives
41	29	11	10	4 3
PHASE 5	MEASURES AND COMMUNICATIONS	Definition and monitoring of performanc measures (key performance indicators) Accountability strategy		NUMBER OF RESPONDENTS BY C (percentage)
PHASE 4	IMPLEMENTATION	Development and undertaking of specifi efforts based on the priorities retained Implementation of a sustainable development governance structure	c 010	Its employees, customers, suppliers, investors, the co company has facilities, non-governmental organizations i development, and any other group or individual with a mo in the company and likely to be affected by i
PHASE 3	VISION AND STRATEGY	Definition of the company's vision (for all groups) and identification of strategic priorities Validation with the Management Committee		CASCADES' STAKEHOL
PHASE 2	CONSULTATIONS WITH STAKEHOLDERS	Consultation with internal stakeholders (employees) Consultation with external stakeholders (clio suppliers, investors, NGOs, communities) Synthesis of risks and favourable opportuni	6	CONSULTATIONS WITH STAKEH In 2009, Cascades conducted consultations with its stake first formal consultation exercise specifically on sustai An online survey was developed, targeted interviews and consultation workshops were he
PHASE 1	INITIAL ASSESSMENT AND PROJECT PLANNING	Initial assessment Establishing the project's direction, parameters, and preliminary plan	2009 2008	

HOLDERS

keholders-the company's ainable development. vs were conducted, eld.

LDERS

communities where the s interested in sustainable nore or less direct interest its activities.

CATEGORY

Investors

2

CASCADES' STAKEHOLDERS

P. 20

RESULTS OF THE MATERIALITY ANALYSIS

The consultations established the initial topics for discussion in terms of sustainable development challenges. A materiality analysis helped focus on the major issues. From which 18 were retained, thus defining our first plan. The challenges **in bold** in the legend are those that were retained and for the most part are within the materiality or high level of materiality zones.

IMPORTANCE OR INCREASING POTENTIAL IMPACT FOR CASCADES >>



LEGEND





THE FOLLOWING PROVIDES IMPORTANT INFORMATION ON THE MEASUREMENT INDICATORS USED BY CASCADES OR ITS INDUSTRY.

NET SALEABLE PRODUCTION

Environmental data is compiled using net saleable production in metric tonnes produced and machine dried (metric tonnes of saleable products).

A METRIC TONNE

A metric tonne is equivalent to 1000 kilograms or 2204 lbs. (imperial system). It is known as a "metric" tonne to differentiate it from other types of tonnes used in certain technical areas (short tons and long tonnes).

Cascades' production is calculated in metric tonnes.

1 METRIC TONNE

1,000 KILOGRAMS 2,204 LBS.

A SHORT TON

A short ton is equivalent to 0.907 metric tonne. In the context of recycled fibres, tonnage is calculated in short tons.

1 SHORT TON

907 KILOGRAMS 2,000 LBS.



Non-renewable energy



Renewable energy





VIRGIN FIBRES

Virgin fibres are also referred to as wood fibres in contrast to recycled fibres. This term includes logs, wood chips, wood pulp (also referred to as market pulp), and any product originating from these fibres used to manufacture products.



P. **23**

PERFORMANCE **REPORT ON THE** 2010 - 2012**SUSTAINABLE** DEVELOPMENT PLAN

PLEASE NOTE THAT ALL RESULTS ON THE FOLLOWING PAGES ARE FOR CASCADES' UNITS IN **NORTH AMERICA**. THIS WAS THE FRAMEWORK CHOSEN FOR THIS INITIAL FORMAL SUSTAINABLE DEVELOPMENT EXERCISE.



11.12



10.96

TARGET

0.45

PERCENT ACHIEVED

24%

INDICATOR

GIGAJOULES OF ENERGY PURCHASED / METRIC TONNE OF SALEABLE PRODUCTS (GJ/MT)

TARGET

-6% IN 2012 COMPARED TO 2010

ENERGY CONSUMPTION GOAL REDUCE THE QUANTITY OF ENERGY PURCHASED TO MANUFACTURE OUR PRODUCTS

ENERGY EFFICIENCY: AN EVER-PRESENT CHALLENGE

etween 2010 and 2012, production in North American manufacturing plants **decreased by 2.7%** (excluding plant closures). Since the basic amount of energy required to operate these plants remains the same, each time there is a decrease in production, there is also a decrease in efficiency in gigajoules per metric tonne (GJ/mt). Notwithstanding this trend and despite a decrease in production tonnage, Cascades succeeded in achieving a 1.44% reduction in GJ/mt. The 6% reduction target was not reached, however.

DESCRIPTION OF THE INDICATOR THE DIFFERENCE BETWEEN ENERGY PURCHASED AND ENERGY USED

Energy purchased is energy acquired from different markets, whereas energy used may include self-generated energy in some pulp and paper plants. This is the case at one Cascades plant, Norampac – Cabano, which uses black liquor, the liquid produced from processing virgin fibres into pulp. This liquor, composed of lignin and hemicellulose residue, is burned in a pot to recuperate most of the chemical products needed for pulping and producing energy. Thus, the energy used by Cascades is divided into 2 categories: the portion of energy purchased, which is 97%, and the portion self-generated, which is 3%. Adding the results, based on the amount of gigajoules used, Cascades' energy intensity is:

2010	2011	2012
11.44	11.40	11.34
GJ/MT	GJ/MT	GJ/MT

However, given that Cascades' energy efficiency plans aim to reduce its reliance on market-sourced energy, the indicator that the company has chosen is energy purchased.

CONSUMPTION OF DIRECT ENERGY ACCORDING TO ENERGY SOURCE

THAN THE INDUSTRY

av/frage



MATERIAL FOR REFLECTION According to Energy Star, less energy is required

to produce a sheet of recycled paper than to produce a sheet of virgin paper: 12 watts/hour versus

 $|() | N \cap F$



ENERGY CONSUMPTION

1. ENERGYSTAR.ORG: HTTP://WWW.EU-ENERGYSTAR ORG/EN/EN 032.SHTML 2. FOREST PRODUCTS

3. SOURCE : NATURAL **RESOURCES CANADA**

SHORT LINK: HTTP://LC CX/IIB

ASSOCIATION OF CANADA, 2011

P. 27

THE **3R**s

APPLY TO ENERGY TOO

- **1** REDUCE AT SOURCE
- 2 RECUPERATE ENERGY LOSSES
- REPLACE WITH MORE ENERGY EFFICIENT TECHNOLOGY 3

AN ENERGY TEAM TO ASSIST **OUR PLANTS**

In 1997, Cascades established an Energy Action Group (Cascades GIE Inc.), a team that today consists of a dozen or more energy efficiency specialists whose mission is to help plants reduce their energy consumption. The Group has a budget devoted exclusively to funding energy efficiency projects in our plants.

AMONG THE PROJECTS

Improvement of the Norampac – Trenton vapour system, which among other things reduces the amount of vapour per tonne produced by 15%.

Energy recovery from the Boxboard Group - Jonquière plant's dryer, which leads to the waste reclamation of 11.500 tonnes of of 42,000 GJ/year!

additional bark each vear. The boiler now uses about 50% less electricity, and its emissions of ash into the atmosphere have been reduced by 33%.

Replacement of the hood at the Tissue Group – New York plant: this project alone has created savings

Expansion of the Lachute plant, which was awarded the Gold level of the LEED™ certification. Using 60% less energy than a standard Canadian building of its type, the Lachute plant is a project that illustrates Cascades' leadership in sustainable development.

Cascades GIE clearly plays a role in energy performance

were carried out, with total savings of more than

Optimization of the HVAC system (heating, ventilation, air conditioning) at Norampac - Viau. leading to a remarkable 25% reduction in natural gas needs for heating.

throughout the company. Between 2010 and 2012, more than FUTURE YEARS. WE WILL PURSUE OUR EFFORTS, BUT THE CONTEXT IS SUCH THAT IT WILL BE DIFFICULT TO ACHIEVE REDUCTIONS OF **MORE THAN 1%** PER YEAR." FABIEN DEMOUGEOT. DIRECTOR OF CASCADES GIE INC.

"CASCADES HAS BEEN PROACTIVE IN ITS OUEST ENERGY CONSUMPTION FOR ENERGY EFFICIENCY SOLUTIONS SINCE THE LATE 1990s. THERE IS NO SHORTAGE OF IDEAS AND **PROJECTS TO OPTIMIZE OUR WORK METHODS AND PROCESSES, BUT MAJOR** GAINS ARE INCREASINGLY **DIFFICULT TO ACHIEVE. IN**



THE SAVINGS IN GIGAJOULES RESULTING FROM THE PROJECTS CARRIED OUT BY CASCADES GIE IS EQUIVALENT TO THE ANNUAL ENERGY CONSUMPTION OF



1. SOURCE: NATURAL RESOURCES CANADA SHORT LINK HTTP://I C CX/IIB



SAVINGS IN GIGAJOUI ES RESULTING FROM THE PROJECTS CARRIED OUT 2011 2012 350.621 423.459



GUY C. HACHEY, PRESIDENT AND CHIEF OPERATING OFFICER OF BOMBARDIER AEROSPACE, AND ALAIN LEMAIRE, EXECUTIVE CHAIRMAN OF THE CASCADES BOARD. THE TWO COMPANIES CONCLUDED A NOVEL PARTNERSHIP AGREEMENT IN 2010. WHILE THE CASCADES ENERGY ACTION GROUP CARRIED OUT AN ENERGY AUDIT AT A BOMBARDIER PLANT BOMBARDIER PURCHASED ENVIRONMENTALLY RESPONSIBLE PRODUCTS MANUFACTURED BY CASCADES.



P. 29



CASCADES PARTNERS WITH ENERGY STAR®

In 2010, Cascades partnered with the U.S. Environmental Protection Agency's (EPA) ENERGY STAR® program by making a commitment to protect the

environment through the continuous improvement of its energy performance. In an effort to support this commitment, Cascades' manufacturing plants are participating in the ENERGY STAR® Challenge for Industry. This challenge is a tool designed to help energy managers and industrial manufacturing sites improve energy performance and set goals. Industrial sites participate by committing to the pre-established goal of reducing energy intensity by 10 percent within 5 years or less. To date, three american facilities in the Tissue Group (Memphis, Waterford and Pittston), have met the ENERGY STAR® Challenge for Industry.

CASCADES' EXPERTISE SERVING CUSTOMERS AND THE COMMUNITY

In addition to improving the energy status of Cascades' units, the GIE team is devoted to improving the energy record of the company's partners. In 2010, Cascades established the "sustainable partnerships" program, offering potential clients access to all of Cascades' expertise. The same year, Cascades finalized a partnership with the multinational company Bombardier Aerospace. In addition to acquiring a range of environmentally responsible products made by Cascades, Bombardier invited Cascades GIE Inc.'s engineers to perform energy audit of its Saint-Laurent facility. Since then, Cascades has concluded similar agreements with other large corporations.

MOST RECENTLY, CASCADES GIE WON A HYDRO-OUÉBEC **TENDER TO ESTABLISH** WITHIN ITS OUEBEC INDUSTRIAL CLIENTELE TECHNICAL-COMMERCIAL APPROACHES THAT FOSTER THE IMPLEMENTATION OF ENERGY MANAGEMENT PROCESSES RELATED TO THE NEW ISO 50001 STANDARD PUBLISHED IN 2011. CASCADES **GIE WILL GUIDE THREE OUEBEC PILOT PLANTS** FOR TWO YEARS. THE GOAL OF THE PILOT PROJECT IS TO ESTABLISH IN SPRING 2015 A NEW ENERGY EFFICIENCY PROGRAM FOR THE INDUSTRIAL SECTOR.



208

194

2012

2010



TARGET

95

PERCENT ACHIEVED

200%

INDICATOR

KILOGRAMS OF CO₂ EQUIVALENT / METRIC TONNE OF SALEABLE PRODUCTS (KG CO₂ EQ./MT).

TARGET

-6% IN 2012 COMPARED TO 2010

GAS EMISSIONS AND RENEWABLE ENERGY GOAL REDUCE GREENHOUSE GASES EMISSIONS BY FAVOURING THE USE OF RENEWABLE ENERGY OVER FOSSIL FUELS

REENHOUSE

OUR GREENHOUSE GAS EMISSIONS

ver the years, a large majority of Cascades' plants converted their steam boilers fueled by thick oil to natural-gas-fired systems. In addition to being more energy efficient, these systems reduce the atmospheric emissions of particles, sulphur compounds, and greenhouse gases. The use of combustion burners in several facilities also reduces nitrogen oxide emissions.

In addition to these changes, several business decisions taken in the past three years have had a positive effect on Cascades' results in air quality. Among them were the closure of the kraft pulp room in East Angus in 2012. The Norampac – Trenton and Boxboard Group – Jonquière plants also increased their ratio of biomass usage, which fosters CO_2 emission reductions.

Thanks to these factors, the 6% reduction target was largely achieved.

The constant improvement of energy projects by Cascades GIE specialists and plants contributed to achieving the goal. Since 2012, the action group has been measuring the impact of each of its energy efficiency projects by converting the energy saved into kilograms of CO_2 equivalent. Projects carried out during that specific year represent a **decrease of nearly 20,000 tonnes of CO**, equivalent.

Special projects such as the installation of a biogas pipeline from the Sainte-Sophie landfill site to Cascades' fine papers plant in Saint-Jérôme contributed significantly to the company's improved record of greenhouse gas emissions. Since this innovative project was implemented, the plant reduced its emissions

by 90%, from 76,227 tonnes of CO_2 in 1990 to 7,406 tonnes in 2012. Cascades also launched industrial ecology projects by replacing some of its steam boilers with the purchase of steam produced by municipal incinerators located near Cascades' facilities. The projects are profitable for both parties, and they enable Cascades to eliminate the consumption of fuel and the emissions that go with it.



SINCE OUR **REFERENCE YEAR.**" LÉON MARINEAU. VICE-PRESIDENT. ENVIRONMENT. CASCADES



ENTRÉE PRINCIPALE BIOGAZ



WOOD RESIDUE UTILISATION

Cascades' greenhouse gas record is similar to the industry average despite the fact that it consumes half as much energy. This is in part due to the company's lesser use of wood residue (biomass) than other pulp and paper companies, since most of the production comes from recycled fibre. Biomass is considered

214 GREENHOUSE GAS EMISSIONS AND RENEWABLE ENERGY

P. 31

Biomass makes up about 20% of the energy sources Cascades uses and comes mostly from sawmills located near our facilities. In comparison, the same proportion is on average 68% for other paper manufacturers in the Canadian industry.1

CASCADES' PERFORMANCE IS CONSISTENT WITH THE **INDUSTRY STANDARD, EMITTING 183 KILOGRAMS OF** CO2 EQ./MT COMPARED TO THE CANADIAN INDUSTRY

CASCADES VIS-À-VIS THE INDUSTRY

AVERAGE OF 180 KILOGRAMS OF CO2 EQ./MT.2

WE RECOVER... AT ALL LEVELS

Three of Cascades' plants (Jonquière, Trenton and Cabano) have found ways to be more efficient with energy. Combustion gases extracted from manufacturing processes serve to produce hot water used for various operational needs. This approach saves energy and consequently reduces greenhouse gas emissions.

RENEWABLE ENERGY

Cascades' main source of energy is electricity (about 30% of total consumption). Part of it is renewable, such as that produced in Quebec and British Columbia, while the second portion, in the United States and Ontario, is generated from natural gas, coal, and nuclear energy, which are non-renewable. To increase the proportion of renewable energy used by Cascades, it is therefore essential that the company creates its own opportunities. Several renewable energy projects are being studied, and some will be launched in the coming months and years. Moreover, Cascades will continue to be on the lookout for promising projects, such as the biogas one at its plant in Saint-Jérôme.

THE PROPORTION OF RENEWABLE ENERGY USED BY CASCADES REMAINED STABLE IN THE PAST THREE YEARS

SOURCES OF RENEWABLE ENERGY

	2010	2011	2012
Wood Residue	19.2%	19.5%	19.8%
Electricity ³	13.7%	14.5%	14.1%
Biogas	4.2%	4.3%	4.2%
TOTAL	37.1%	38.3%	38.1%

1. FOREST PRODUCTS ASSOCIATION OF CANADA 2011 SUSTAINABLE DEVELOPMENT REPORT

2. IBID

3. INCLUDES THE PROPORTION OF ELECTRICITY USED IN QUEBEC PLANTS (HYDROELECTRICITY)

IMPACT OF TRANSPORTATION ON ATMOSPHERIC EMISSIONS



During the 2009 consultations with stakeholders, greenhouse gas emissions from the transportation component and activities emerged as an important material issue. The transportation component raised a lot of questions, probably due to its visibility. Yet transportation is responsible for only a very small proportion of the company's overall greenhouse gas emissions.



This small proportion of emissions generated by transportation relative to it's manufacturing activities has not stopped Cascades from being one of the most proactive companies in the implementation of green measures, which have led to various important recognitions in recent years. Cascades has been a precursor for a series of new environmental and social initiatives:

- AERODYNAMIC TRUCK DESIGN – ELECTRONIC TRUCK ENGINE CUTOFF AT FOUR MINUTES WHEN IDLING AERODYNAMIC LATERAL APRONS TIRE-PRESSURE CONTROL SYSTEM

USE OF LARGE DOUBLE ROAD TRAINS (TWO 53-FOOT TRAILERS)

MORE FREQUENT MECHANICAL MAINTENANCE

DISCOUNTS FOR SHIPMENTS OUTSIDE PEAK TRAFFIC HOURS

LARGE TIRES TO REPLACE TANDEM TIRES

INCENTIVES FOR DRIVERS WHO ACHIEVE GAS EFFICIENCY TARGETS

TRAINING ON A PREVENTIVE AND ENERGY-EFFICIENT WINTER DRIVING SIMULATOR

"HAVING A FLEET OF ENERGY EFFICIENT VEHICLES COMES WITH MANY BENEFITS. THAT'S WHY WE'RE CONSTANTLY LOOKING FOR NEW PARTNERSHIPS AND NEW SOLUTIONS FOR IMPROVING THE SERVICES WE OFFER." ALAIN BOUTIN, DIRECTOR OF RISK MANAGEMENT AND COMPLIANCE, CASCADES TRANSPORT



CASCADES TRANSPORT HAS BEEN A MEMBER OF THE **SMARTWAY** PROGRAM SINCF 2006 To learn more about the SmartWay program, visit www.sclcanada.org.

The goal of the SmartWay program is to reduce greenhouse gas emissions and other pollutants from the transportation of merchandise. It is administered at the national level by Natural Resources Canada. As a member, Cascades Transport is committed to evaluating its transportation activities in relation to exemplary industry practices, in order to reduce its fuel consumption. And by doing so, it also improves its sustainability.1

21 GREENHOUSE GAS EMISSIONS AND RENEWABLE ENERGY P. 32

1. HTTP://OEE.NRCAN.GC.CA/ TRANSPORTATION/BUSINESS/ SMARTWAY/18053







67.3%

TARGET

67.9%

PERCENT ACHIEVED

82%

INDICATOR

KILOGRAMS OF WASTE RECOVERED / KILOGRAMS OF WASTE GENERATED

TARGET

+6% IN 2012 COMPARED TO 2010

PAPERMAKING WASTE GOAL INCREASE THE RECOVERY OF PAPER WASTE

NOTHING IS LOST, NOTHING IS CREATED, EVERYTHING IS TRANSFORMED

he famous saying was a favourite of Antonio Lemaire, father of the founders of Cascades. If Cascades uses waste to make new products, the waste from its own manufacturing can in turn be recycled. This is the industrial ecology approach in which the waste from an industrial process is no longer considered waste but rather raw materials that can be used in another industrial process, thus forming multiple material loops. Recycling enables waste to be used in the manufacture of a new product, but that new manufacturing process also generates its share of waste. Fortunately, research efforts have prevented much of that waste from going to landfill.

Residual materials have been divided into two groups: paper waste and multi-materials.

PAPERMAKING WASTE REPRESENTS 98% OF TOTAL WASTE

According to data from Cascades' Environment Department, almost all waste from the company's activities comes from manufacturing (98%). The other 2% comes from normal daily activities (office work, equipment maintenance); this is described in Challenge 04 (see page 36).

BUNDLES OF RECYCLED PAPER CONTAIN MORE THAN... PAPER!

The main raw material purchased by Cascades—recycled fibre is not 100% pure. Despite the sophistication of machines and efforts by sorting centre staff, the bundles of waste paper purchased by Cascades come with more than just paper. Several other types of material can be found: plastic, metal, glass. The volume of these other materials represents about 10%. In other words, in a tonne of recycled paper, there is 100 kg (220 lbs.) of contaminants. In addition to the waste that gets through manual and mechanical sorting, waste paper comes with additives such as ink and mineral fillers that must be removed. These additives increase the proportion of contaminants. The direct consequence is that the more recycled fibre Cascades uses, the more waste that comes with it.

DESCRIPTION OF THE INDICATOR

By choosing to recycle, Cascades depends on the quality of its raw materials. The indicator (waste recovered / waste generated) was determined with this important factor in mind. All of the company's waste comes from its processes and not from manufacturing (defective rolls and rolls with the wrong technical specifications are entirely re-introduced into the process). As a result, it is more representative to measure the aspect over which the company has real control, which is the recovery of waste. The rate of waste to landfill / net saleable production could have been considered, but it would not reflect the true efforts invested in this area.

CATEGORIES OF WASTE GENERATED

Contaminants in the bundles of recycled cardboard and paper are removed at the pulp manufacturing stage. Those that take up the most space are rejected by the pulper, which carries out the first step in the pulp-making process. Other equipment such as basic and fine sieves then help remove other smaller contaminants like plastic, polystyrene, staples, and paper clips, generating another lot of waste. This material is referred to as screen reject. This material is referred to as screen reject. For now, very little of that waste is recovered. Since plastic is a large part of the waste, and it has good heating value, its repurposing to produce energy offers the best option (Cascades is considering producing steam by burning it, for example).

Mixed and de-inking sludges are the other categories of waste generated in the manufacturing process. Mixed sludge comes from the treatment of effluent from manufacturing plants, which have their own water treatment systems (see Challenge 08 for details). Spreading the sludge for agricultural purposes is the main option for repurposing since the sludge has good fertilizing properties. It can also be used to produce energy through co-generation (biomass boilers). As the name indicates, de-inking sludge comes for the de-inking process, which involves washing paper and removing ink and varnish residues.

In the mid-1970s, the Norampac – Cabano plant was a pioneer in Quebec when it began repurposing mixed sludge for an organic amendment in agricultural spreading. For its part, de-inking sludge contains minerals that act as an excellent liming agent for acidic soil. Over the years, research efforts have found several other uses for converting de-inking sludge: it helps restore damaged sites such as old mines and gravel and sand pits; it serves as a method for covering sanitary landfill sites; and it is used as fuel in boilers to produce the energy or steam required in the manufacturing process.



P. 34

PAPERMAKING WASTE THAT CAN NOT YET BE REPURPOSED IS TAKEN TO SAFE AND COMPLIANT LANDFILL SITES.

EVOLUTION OF THE GENERATION AND RECOVERY OF WASTE AT CASCADES

Quantity of waste (wet metric tonnes)

	2010	2011	2012
GENERATED	784,062	719,623	664,537
RECOVERED	502,501	468,454	447,191
RECOVERED PROPORTION (%)	64.1	65.1	67.3

OUTSTANDING PROJECTS IN RECENT YEARS

During the past three years, business decisions have affected the course of waste recovery. Among those decisions were closure of the kraft pulp room in East Angus, the agricultural repurposing of de-inking sludge from Tissue Group – Tennessee, as well as the use of sludge for fuel at Cascades Lupel (Trois-Rivières) and Boxboard Group – Jonquière to produce steam.

Reducing the impact of these advances is the increasing proportion of contaminants in bundles of used paper, having a negative effect on the results associated with this challenge.

Cascades recovers 67.3% of the waste generated by its activities and believes that in the long term about half of the waste currently sent to landfill will be recovered—the various plastics, metal bundle pins, paper dust, printing blankets, and paper machine felts.





P. 35

MOST OF CASCADES' PRODUCTION WASTE CONSISTS OF DE-INKING SLUDGE. IT IS LARGELY REPURPOSED IN VARIOUS FORMS: FUEL (BIOMASS BOILERS), AGRICULTURAL SPREADING (CALCIUM APPLICATION), INSERTION IN THE FILL LAYER (CARDBOARD PRODUCTION), AND RESTORATION OF DAMAGED SITES

"SEVERAL AVENUES ARE BEING STUDIED, AND WE ARE KEEPING ON THE LOOKOUT FOR NEW RECYCLERS ON THE MARKET. THIS IS A SECTOR IN CONSTANT FLUX, WHICH MAY ENABLE US TO TAKE ANOTHER STEP FORWARD IN REDUCING OUR QUANTITY OF WASTE SENT TO LANDFILL." LÉON MARINEAU, VICE-PRESIDENT. ENVIRONMENT.

CASCADES

IN 2012 PLANTS RECOVERED MORE THAN 90% OF THEIR WASTE

CASCADES VIS-À-VIS THE INDUSTRY

Without knowing other companies' measurement standards, it is difficult to compare Cascades to the rest of the industry. As well waste varies according to the nature of the company: plants that use recycled paper and cardboard in their production do not generate the same kind of waste as those that use virgin fibre. At this stage of industry knowledge, Cascades' goal is to constantly improve its results and remain on the lookout for opportunities to recover its waste.





2011



2.09

TARGET

.96

PERCENT ACHIEVED

74%

INDICATOR

KILOGRAMS OF WASTE MATERIAL SENT TO LANDFILL / METRIC TONNE OF SALEABLE PRODUCTS (KG/MT)

TARGET

-20% IN 2012 COMPARED TO 2010



THE MULTI-MATERIAL RECYLCING PROGRAM: A CHALLENGE MULTIPLIED BY 19

s mentioned in Challenge 03, paper waste comprises 98% of the total waste generated by Cascades' activities. Other materials (2%) are part of a multimaterial recycling program.

In the early 2000s, Cascades established a comprehensive program to manage this residual matter, perhaps less significant in terms of volume, but nevertheless the most visible to personnel. This program covers 19 categories of material, divided into three groups: hazardous materials, nonhazardous materials, and household recycling. From plastic strapping to electrical wires, including used oil and batteries, everything that falls within a recycling program or a recycling network is recycled. This program is in place in all of Cascades' operating units.

Each Cascades facility has an individual responsible for the multi-material collection program. They conduct a diagnosis of the material generated and ensure that bins are installed for the material to be collected. They must also find recyclers for the materials their unit generates. Those in charge receive support from Cascades' Environment Department, which has developed expertise in the field. It provides not only advice but also a wide range of tools to help units accomplish their tasks, in particular communication tools (posters, stickers, leaflets) and a directory of sources of equipment to be installed based on the types of materials.


DESCRIPTION OF ON THE INDICATOR

The papermaking waste indicator is a calculation of the recovery rate obtained by dividing the quantity of material recovered by the quantity of material generated. However, the same cannot be done in the multi-material program. Based on experience to date, it is impossible to give an accurate weight of the material recovered. It is significant, but the data is very piecemeal, and furthermore the bins and containers vary greatly in size. Contrary to waste, which is collected with a weigh bill providing companies with information on the quantities generated, recycling is not done on a weight basis, and thus the amounts recovered remain unknown.

THIS OVERALL SITUATION HAS LED CASCADES TO CHOOSE AN INDICATOR DIFFERENT FROM THAT FOR PAPERMAKING WASTE, I.E. THE WEIGHT OF THE WASTE SENT TO LANDFILL VS. PRODUCTION.

1
•

	2010	2011	2012
QUANTITY SENT TO LANDFILL (KG)	5,522,000	4,607,000	4,888,000
PRODUCTION (MT) [*]	2,257,562	2,178 772	2,333,706
KG/MT	2.45	2.11	2.09
*Also includes production at converting plants			

*Also includes production at converting plants.

CONSTANTLY EDUCATE. RAISE AWARENESS. INFORM

According to Léon Marineau, the greatest challenge in this area remains educating, raising awareness, and providing information to the company's employees.

REX MCLAIN SECURITY MANAGER, AND SADITH OSSENI ENGINEER WORK AT CASCADES' SONOCO PLANT IN BIRMINGHAM, ALABAMA. THIS IS ONE OF OUR THREE FACILITIES THAT HAVE ACHIEVED THE ZERO LANDFILL TARGET. THE RESULTS OF THIS NEW PROCESS INCLUDE INCREASED INVOLVEMENT FROM EMPLOYEES AND SUBSTANTIAL SAVINGS IN LANDFILL COSTS.

MULTI-MATERIAI RECYCLING

P. 37

IS ZERO LANDEILL ACHIEVABLE?

Well, yes! Three of Cascades' converting plants in North America have achieved this: Cascades Sonoco - Birmingham (Alabama), Norampac - Etobicoke (Ontario), and Norampac - New York City. Zero landfill does not mean zero waste: in the pulp and paper sector, there is no manufacturing process without waste. The waste from these three plants has not magically disappeared: it has been taken by other organizations located nearby interested in re-using it in their manufacturing processes, often to meet energy needs. This is an example of the industrial ecology principle where the outputs of some become the inputs of others.

HAZARDOUS DOMESTIC WASTE

Hazardous waste generated by plant activities (used oil, leftover chemical products, solvents, inks, glues) is managed according to the storage and disposal standards in force in the country where the units are located.

In 2011, the Cascades Sonoco plant in Birmingham, Alabama attained the zero landfill objective, a target that Plant Manager Emmanuel Boullay and his team had set in 2009. In 2011, they put an end to their regular waste collection service. Materials are now sorted at source by employees. Discarded materials for which there is no local recycler are put through a compacter and transported by an outside business concern to a transfer centre. Materials considered recyclable are then sorted, and the ultimate waste is sent to the cement plant located nearby for use as an energy source to make concrete. The combustion ashes are even incorporated into the concrete. In addition to rallying employees towards a common goal, this new program enables the plant to save more than \$35,000 per year in landfill fees.

"ONE PERSON IS IN CHARGE OF THE MULTI-MATERIAL RECYCLING PROGRAM IN EACH PLANT. THIS PERSON MUST ENSURE THE PROGRAM RUNS SMOOTHLY. **INSTALL BINS IN STRATEGIC LOCATIONS, AND HELP MAKE HIS/HER COLLEAGUES** MORE AWARE OF THE IMPORTANCE OF SOUND WASTE MANAGEMENT. OUR AWARENESS-RAISING EFFORTS IN THIS REGARD ARE NEVER-ENDING." LÉON MARINEAU, VICE-PRESIDENT, ENVIRONMENT, CASCADES



CASCADES VIS-À-VIS THE INDUSTRY

As is the case for papermaking waste, the industry has no comparative basis for this indicator. Cascades' primary concern is therefore to pursue its efforts to be as efficient as possible in managing its waste and finding avenues for its repurposing. In terms of materials in the recycling program, it is primarily the cooperation of employees that can have a positive impact on the volume recovered. This is why Cascades regularly reminds its employees through various means of internal communication of the 4R hierarchy (Reduction, Re-use, Recycling, Repurposing), while stressing that the best waste is the waste that we try to avoid generating.



CASCADES: A PARTNER IN QUEBEC'S WASTE REDUCTION WEEK

Since 2006, Cascades has been a partner in Quebec's waste reduction week (Semaine guébécoise de réduction des déchets) which takes place in October. The goal of the event is to make Quebecers more aware of the environmentally sound management of waste material and to propose concrete solutions for action. In 2010, Cascades organized the event "Autopsy of a container" in which employees and the media were invited to participate in the unloading of a dumpster whose contents were then analyzed. This activity enabled everyone to note, in full transparency, that while Cascades owes its existence to recycling waste, its performance was not quite perfect. In the container were materials that should have been sent for recycling, hence the importance of continuing efforts to enhance awareness among employees, as well as among suppliers who are not always aware of the existence of the multi-materials recycling program.

ALAIN LEMAIRE, EXECUTIVE CHAIRMAN OF THE CASCADES BOARD, AND LAURENT LEMAIRE. EXECUTIVE VICE CHAIRMAN, DURING THE AUTOPSY OF A CONTAINER EVENT, ORGANIZED DURING THE 2010 WASTE REDUCTION WEEK IN QUEBEC. WITH MEDIA REPRESENTATIVES IN ATTENDANCE THE EVENT HELPED MAKE PARTICIPANTS AWARE OF THE NEED TO BE CAREFUL ABOUT SORTING WASTE MATERIALS, THIS WAS A GOOD EXAMPLE OF CASCADES' BELIEF IN TRANSPARENCY.





21%

21%

2012



20%

PERCENT ACHIEVED

115%

INDICATOR

PURCHASES* FROM SUPPLIERS WHOSE PRACTICES HAVE BEEN ASSESSED AND DEEMED RESPONSIBLE / TOTAL PURCHASES

TARGET

20% IN 2012

SUPPLIERS' COMMITMENT TO SUSTAINABLE DEVELOPMENT GOAL OBTAIN SUPPLIES FROM RESPONSIBLE SUPPLIERS

SUPPLIERS: KEY PLAYERS IN CASCADES' SUCCESS IN A CONTEXT AS COMPETITIVE AS THAT OF COMMODITY PRODUCTS, AND KNOWING THAT PURCHASES REPRESENT BETWEEN 40% AND 80% OF THE TOTAL COST OF OUR PRODUCTS, THE CHOICE OF SUPPLIERS BECOMES A STRATEGIC DECISION WITH A CRUCIAL IMPACT ON THE COMPANY'S OVERALL PERFORMANCE. he Corporate Procurement Department strives to build and maintain a network of suppliers that plays a role in helping the Corporation meet its ongoing competitive challenges.

The choice of a supplier is based on an approach with tangible multi-criteria, involving factors such as product quality, cost, availability, performance, delivery timelines, delivery reliability, technical ability, and after-sales service. The criteria vary according to the products sought.

Other less tangible criteria also play an increasing role in decisions: the supplier's reputation, branding, and business practices with respect to a number of aspects, such as the environment, working conditions, human rights, the supply chain, governance, and ethics.

*PURCHASES NEGOTIATED BY THE CORPORATE PROCU-REMENT DEPARTMENT. THE PURCHASING CATEGORIES INVOLVED ARE "GOODS AND SERVICES" AND "CHEMICAL PRODUCTS".

METHODS FOR ASSESSING SUPPLIERS

When choosing a supplier, Cascades weights each criterion according to the product sought. A score is calculated for each supplier by adding the scores for each criterion multiplied by its associated weighting factor. In 2009, Cascades decided that social responsibility would become an essential criterion for each of its suppliers and that the weighting of this criterion could reach a maximum of 15% of the total score used in the decision-making process. Thus, a supplier with good business practices having put in place various environmental, social, and economic management systems could be favoured over another supplier less advanced in the area.

Cascades' procurement and sustainable development teams conducted an assessment of suppliers' business practices based on an internally designed questionnaire. A total of 73 suppliers responded to Cascades' call between 2009 and 2010. However, Cascades' teams had to admit that this evaluation process conducted internally was burdensome and difficult to manage.

Consequently, in 2012, Cascades set aside its internally designed questionnaire and hired EcoVadis, a firm specializing in the field. Systematically, for each new call for tenders, suppliers wishing to take part must fill out a questionnaire covering **21** parameters grouped under four themes: environment, social responsibility, ethics, and suppliers.

ALL OF THE SUPPLIERS ASSESSED TO DATE, REPRESENTING



HAVE BUSINESS PRACTICES DEEMED RESPONSIBLE ACCORDING TO THE ESTABLISHED CRITERIA. This model allows a number of procurement criteria, both quantitative and qualitative, to be assessed at the same time. An assessment of social responsibility helps Cascades develop a profile of its suppliers. Businesses with more maturity in this area can have a positive impact on Cascades' products and production methods and processes, thus helping create a competitive edge for the company and, at the same time, managing risk more proactively.

During our first year of partnership with EcoVadis, **35 suppliers** were assessed in the "goods and services" and "chemical products" categories. Cascades targeted these sectors as a priority because it felt that they have the greatest environmental and social risk factors.

OBSTACLES ENCOUNTERED

While there may be more and more talk of responsible procurement and increased attention from research groups, the assessment of suppliers is still a rare and innovative approach. At the present time, only businesses that are fully committed to sustainable development have ventured to take this approach. When Cascades initiated this process in late 2008, leading chemical product manufacturers confirmed it: multinationals much larger than Cascades had never been assessed in this way.

Since Cascades' association with EcoVadis, several suppliers wanting to take part in the call for tenders have not wanted to complete the assessment. The questionnaire is demanding and involves a cost: two critical aspects of a serious evaluation, and two hindrances for smaller organizations that do not have the information at hand or the personnel assigned to the task.

VISUAL OF AN ASSESSMENT SHEET



The final word on this issue is clear: any supplier can answer a call for tenders from Cascades and has the right to refuse the assessment requested. However, suppliers are fully aware that this automatically costs them points, and if they are chosen for their performance with respect to other criteria, they will have to undergo an evaluation sooner or later in the process. In a manner of speaking, this is the new calling card for working with Cascades, which is convinced that this approach is in everyone's interest.

The person in charge of implementing this initiative views this new approach with suppliers as a close reflection of Cascades' values. It's a simple equation:

"THE MORE THE COMPONENTS OF OUR PRODUCTS RESPECT CORPORATE SOCIAL RESPONSIBILITY PRINCIPLES, THE EASIER IT IS FOR US TO TRANSFORM THEM INTO ECO-FRIENDLY PRODUCTS."

> STÉPHANE DUBÉ, VICE-PRESIDENT, SUPPLY CHAIN, CASCADES



SUPPLIERS' COMMITMENT

SUSTAINABLE SUPPLIER AWARD

In 2009, the Corporate Procurement Department created the Sustainable Supplier Award to recognize the efforts of suppliers that have committed to sustainable development with new technology, improved processes, or products that enable one or more Cascades plants to improve their environmental, social, or economic performance.

The Sustainable Supplier Award is a prime example of the importance that Cascades attributes to good business relations.

> "YEAR AFTER YEAR WE SUCCEED IN MAKING A NAME FOR OURSELVES AND IN MARKETING TOP QUALITY PRODUCTS, AND THIS IS IN PART THANKS TO OUR SUPPLIERS THAT PROVIDE US WITH CONCRETE SOLUTIONS

AND HELP US IMPROVE." MARIO PLOURDE, PRESIDENT AND CHIEF EXECUTIVE OFFICER, CASCADES



Since 2009, Cascades suppliers have been invited to submit one or more projects at the end of the year. Members of the Procurement Department and sustainable development teams serve as the jury. The winner is announced at the annual meeting of Cascades plant managers, an event to which the participating suppliers are invited. This occasion serves as an exceptional showcase for a supplier that is hoping to become known among all of the company's decision makers. I SEE THIS PRIZE AS ONE OF THE BEST INCENTIVES FOR ENCOURAGING SUPPLIERS LIKE US TO ENGAGE IN A SUSTAINABLE DEVELOPMENT APPROACH WITH ITS CLIENTS. FOR THE COMING YEARS, XERIUM INTENDS TO CONTINUE DEVELOPING PAPER MACHINE CLOTHING AND ROLLS TECHNOLOGY FOR THE PURPOSE OF IMPROVING THE PERFORMANCE OF ITS CLIENTS.

Harold Bevis, President and Chief Executive Officer Xerium Technologies Inc. Recipient of the 2012 Sustainable Supplier Award

INTEREST IN RESPONSIBLE PROCUREMENT HAS A SNOWBALL EFFECT: ONCE PUT INTO PLACE, SUCH AN APPROACH PROVIDES THE IMPETUS NEEDED FOR THE DEVELOPMENT OF RESPONSIBLE INNOVATIONS AND BEHAVIOUR ON A LARGE SCALE. Stéphane Dubé, Vice-President, Supply Chain Cascades SUPPLIERS' COMMITMENT P. 41

SUSTAINABLE SUPPLIER AWARD TROPHY

Details on the other recipients are available on the company's Web site: cascades.com/en/ sustainable-development/ economy/procurementpractices/suppliers





2010



2012

TARGET

PERCENT ACHIEVED

INDICATOR

PURCHASES OF **RECYCLED FIBRES +** PURCHASES OF VIRGIN FIBRES THAT ARE FSC[®]-CERTIFIED OR EOUIVALENT / TOTAL **FIBRES PURCHASES**

TARGET

+4% IN 2012 COMPARED TO 2010

RFCYCI FD AN RE SUPPLY GOAL INCREASE THE USE OF RECYCLED

FIBRES AND VIRGIN FIBRES THAT ARE **FSC®-CERTIFIED OR EQUIVALENT**

hrough its mission to manufacture products with a high percentage of recycled fibres, Cascades helps divert millions of tonnes of recyclable materials from landfill sites. In addition to removing waste paper and cardboard from the waste stream, the use of recycled fibres considerably reduces the pressure on forests-a doubly positive impact. Virgin fibres, however, remain necessary as the starting point in the recycling loop.

CATEGORY	2010	2011	2012
CONSUMPTION OF RECYCLED FIBRE	81.7%	81.3%	82.2%
CONSUMPTION OF CERTIFIED VIRGIN PULP	0.9%	0.9%	1.3%

CONSUMPTION OF CERTIFIED 0.4% 0.7%1.7% **VIRGIN WOOD/LOGS** 83% 82.9% 85.3% TOTAL

> Covers procurement in North America only. The table on p. 11 of this document presents the company's total procurement, including its activities in Europe.

FIRRE PROCLIREMENT

VERTICAL INTEGRATION

By operating a number of sorting centres in Canada and the United States, Cascades ensures it has a stable supply of recycled fibre. In 2012, the Cascades Récupération and Cascades Recovery sorting centres provided 34% of its supply of recycled fibres, with the remaining portion purchased on the market from over 400 recycled fibre suppliers.



IN 2012, THE TOTAL AMOUNT OF RECYCLED FIBRE PURCHASED BY CASCADES FOR ITS NORTH AMERICAN ACTIVITIES WAS **1,887,713 SHORT TONS**, THE EQUIVALENT OF

> 104 873 FULL 53-FT. TRAILERS. THIS TONNAGE REPRESENTS

> > 82.2% of cascades total fibre procurement.

CERTIFICATION TO TRACE THE ORIGINS OF WOOD FIBRE

In response to a growing demand for certification of its mixed source products (virgin and recycled fibres), in 2009, Cascades sought FSC[®] certification, which is the most internationally recognized standard for forest management. Since then the company has been able to offer FSC[®] Recycled (no virgin fibres) and FSC[®] Mix (virgin and recycled fibres) certified products. FSC[®]-certified products provide assurance of sound forest management involving respect for the biodiversity of tree species and wildlife habitats, tree planting promoting forest renewal, and a ban on clear-cutting, which destroys ecosystems.

 FSC^{\circledast} certification of Cascades' facilities is confirmed by an independent third party, the Rainforest Alliance, in compliance with FSC^{\circledast} standards.





"THE GOAL OF INCREASING THE PROCUREMENT OF RECYCLED AND CERTIFIED FIBRES BY 4% WAS HUGE. WHEN THE OBJECTIVE WAS SET, THE PERCENTAGE OF RECYCLED AND FSC®-CERTIFIED FIBRES IN CASCADES' PROCUREMENTS IN NORTH AMERICA HAD ALREADY REACHED 83%. NONETHELESS,

WE SUCCEEDED IN ATTAINING A RATE OF 85.3% IN 2012, PRIMARILY DUE TO THE ENHANCED DEMAND FOR CERTIFIED PRODUCTS."



JACQUES VERREAULT, FIBRE PURCHASER, SPECIALTY PRODUCTS GROUP



OBSTACLES IN PROCURING RECYCLED FIBRE

The cost of recycled materials, which fluctuates constantly, can be an obstacle to procurement.

WHEREAS IN 2009, SORTING CENTRES SOLD MATERIALS AT RIDICULOUS PRICES BECAUSE OF THE MARKET CRISIS, IN 2011, THE PRICE OF MATERIALS HIT AN ALL-TIME PEAK, SO HIGH THAT VIRGIN FIBRE WAS AT TIMES MORE AFFORDABLE THAN RECYCLED FIBRE.

Contrary to materials like aluminum, fibres are not recyclable ad infinitum. Virgin fibres are vital to the recycling loop. They are also essential to meeting certain quality criteria such as strength, resistance, and softness.

MATERIAL FOR REFLECTION

The statement that a fibre is no longer usable after



RECYCLED AND CERTIFIED FIBRE SUPPLY

P. **44**

has been widely circulated, but never proven. Scientists at Cascades' Research and Development Centre consequently studied the issue with other industry researchers and came to the conclusion that, in actual fact, it is very unlikely that fibres will go through this many recycling cycles in their useful lives. Their research determined that, given the utilisation rate of recycled fibre in paper products as well as the performance of paper machines,



1. THE FIBER CYCLE TECHNI-CAL DOCUMENT, METAFORE SUMMARY REPORT, METAFORE, MARCH 2006.

2. ANALYSE DE L'IMPACT DES CYCLES DE RECYCLAGE SUR LA QUALITÉ DES FIBRES ET DU PAPIER, RESEARCH AND DE VELOPMENT CENTRE, CASCADES, JANUARY 2011.



12.6





2012



TARGET

11.8

PERCENT ACHIEVED

172%

INDICATOR

CUBIC METRES OF WATER / METRIC TONNE OF SALEABLE PRODUCTS (M³/MT)

TARGET

-6% IN 2012 COMPARED TO 2010

DISCHARGE OF EFFLUENT GOAL REDUCE THE DISCHARGE OF EFFLUENT

ater is essential in the paper industry, for both the treatment and processing of fibres and other raw materials and for a vast range of related activities such as washing, cooling, and producing energy from steam.

A lot of water is required to manufacture paper. Fibres, whether they are recycled or virgin, are mixed with water and adhere to one another when the water is extracted by pressure or heat. Before it is turned into paper, pulp is composed of 99% water and 1% fibre.

CASCADES VIS-À-VIS THE INDUSTRY

The nature of Cascades' activities gives it an undeniable competitive edge in terms of water use. Making paper from recycled fibre requires much less water than making paper by processing wood (logs, sawdust, bark) into wood fibre.

Water consumption at Cascades pulp and paper plants varies from 1 to 31 $\,m^3/mt$. Average water consumption is 11.3 m^3/mt , which compares very favourably to the overall Canadian industry average of 61 $m^3/mt.^1$



MORE EFFICIENT THAN THE INDUSTRY AVERAGE





BETWEEN 2010 AND 2012, CASCADES SUCCEEDED IN SAVING (COMPARED TO THE SAME TONNAGE PRODUCED WITH THE CANADIAN PAPER INDUSTRY'S AVERAGE DISCHARGE)...

<u>CASCADES HELPS</u> <u>SAVE MILLIONS</u> OF LITRES OF WATEF



P. **46**

THE VOLUME OF MORE THAN 114,049 OLYMPIC-SIZE POOLS



HOW IS WATER CONSUMPTION CALCULATED?

All Cascades plants are equipped with water meters that measure effluents (water discharges), a good indicator of water consumption. The difference between intake and discharge is in the range of 10%: the water loss being primarily related to drying paper, a loss through evaporation.

CLOSED CIRCUITS

All Cascades plants recycle the water used in the manufacturing process numerous times for various applications, thus limiting fresh water consumption. Water is recirculated within the plants 10 to 40 times before being sent for treatment and returned to source.

Cascades' ultimate goal is to completely close its plants' water circuits, a real operational challenge that some plants have already successfully addressed. This accomplishment considerably reduces the amount of water drawn from rivers, as well as the effluents, which are almost nil. To achieve this, new technologies must be introduced. Significant progress has been made thanks to the efforts of the Research and Development Centre through the installation of new, more efficient and effective sedimentation, filtration, microfiltration, and ultrafiltration equipment. Cascades plans to continue to invest in technologies that permit the reuse of process water and its treatment internally, as well as the closure of water circuits.

SIGNIFICANT PROJECTS IN RECENT YEARS

Three plants closed their water circuits between 2010 and 2012: Fine Papers Group – Breakey Fibres, Tissue Group – Candiac, and Tissue Group – Toronto PM (Whitby). The closing of the kraft pulp room in East Angus also had a positive impact on the company's progress in this area, its effluent discharge having decreased by 60% since this decision was made.



KEY HIGHLIGHTS



P. **47**

AT CASCADES, THE MANUFACTURE OF CONTAINERBOARD REQUIRES THE LEAST WATER OF ALL OF ITS ACTIVITIES: ON AVERAGE 6677M³/MT. AMONG CASCADES' DULP AND PAPER MANUFACTURING PLANTS IN NORTH AMERICA 11 HAVE DISCHARGES UNDER 10 M³/MT 8 HAVE DISCHARGES UNDER 5 M³/MT



In 2012, Cascades' Environment Department called on a firm specializing in water management to obtain tools to lower the water flow of faucets and toilets. In units located in Quebec only, more than



Water savings are estimated at several thousand litres, and financial savings are assessed at \$10,000 PER YEAR.





1.35

2011

1.37

2012



TARGET

1.30

PERCENT ACHIEVED

595%

INDICATOR

KILOGRAMS OF BIOLOGICAL OXYGEN DEMAND + KILOGRAMS OF SUSPENDED SOLIDS / METRIC TONNE OF SALEABLE PRODUCTS

TARGET

-4% IN 2012 COMPARED TO 2010

GOAL IMPROVE THE QUALITY OF TREATED WATER BY REDUCING THE BIOLOGICAL OXYGEN DEMAND AND SUSPENDED SOLIDS

RFATED

SS/mt	B0D/mt
2010	2010
0.96	0.39
2011	2011
0.99	0.38
2012	2012
064	039

INTERNAL AND EXTERNAL TREATMENT OF PROCESS WATER

s mentioned in Challenge 07, the production of pulp, paper, and cartonboard requires the use of a vast amount of water, and yet low net consumption. This water is mixed with raw material (recycled or virgin fibre), which goes through various purification stages before the actual manufacture of paper. This results in fibre deposits and mineral loads in the process water that must be removed before the water is returned to the river.

The quality of water released is regulated by strict standards and any violation of these standards can result in stiff financial penalties. And with reason: releasing contaminated water has repercussions on ecosystems and requires additional disbursements for its reuse, in particular the construction of water treatment stations.

QUALITY CRITERIA

Since water quality measurements are made using many instruments, they are expressed in just as many quality criteria. In the pulp and paper sector, the two parameters are the suspended solids (SS) and five-day biochemical oxygen demand (BOD). Suspended solids are fine, insoluble mineral or organic materials visible to the naked eye. Suspended solids make water murky because they block the passage of light. Water treatment is required primarily to remove the suspended solids and reduce the biological oxygen demand. BOD measures the consumption of oxygen required to decompose the organic matter in the water. The higher the BOD, the higher the pollution.

Wastewater from all Cascades plants is treated. Of the 25 paper plants located in North America, 12 have their own water treatment system. The remaining plants treat their surplus process water internally, and then send it to municipal systems for final treatment, respecting the discharge levels authorized.

In recent years, the company has devoted efforts to reuse this treated water in its processes. This has resulted in benefits for both the receiving environment, which experiences less water removal, and for Cascades, since the re-use of hot water results in a reduction in energy expenses.

CASCADES VIS-À-VIS THE INDUSTRY

Over nearly 20 years, the pulp and paper industry has invested billions of dollars in improving effluent treatment. These investments have produced results; data collected demonstrate marked progress in the quality of the water discharged into rivers. In fact, the SSs fell by more than 70% and BOD has declined by over 90%.¹ Cascades has been part of this trend. The introduction of biological treatment in the mid-1990s enabled the elimination of the toxicity of effluents, the latter being controlled in a very strict manner by most government authorities in the regions where Cascades owns plants.

ON AVERAGE, THE QUALITY OF THE WASTEWATER TREATED AND RELEASED INTO THE ENVIRONMENT BY

CASCADFS IS



and in a number of cases, state-of-the-art equipment is used. In this regard, a significant improvement in water quality will require the development of new technologies and new, even more advanced equipment.

IMPROVEMENT PROJECTS OVER THE LAST THREE YEARS

IN FALL 2011, THE FINE PAPERS GROUP – ROLLAND DIVISION MODIFIED ITS WASTEWATER TREATMENT TO REDUCE SUSPENDED SOLIDS. WITH THE CLOSING OF THE KRAFT PULP ROOM IN EAST ANGUS IN SEPTEMBER 2011, THE BIOCHEMICAL OXYGEN DEMAND AND SUSPENDED SOLIDS OF THIS PLANT WERE REDUCED BY ROUGHLY 30%. AT THE TISSUE GROUP – TENNESSEE PLANT, OPTIMIZATION OF THE MANUFACTURING PROCESS LED TO A DECREASE IN SUSPENDED SOLIDS OF ABOUT 80%.

WATER:

A SHARED RESOURCE

Every year, Cascades invests money and significant effort towards improving its plants' performance in terms of wastewater treatment. It also works in concert with government authorities to establish environmental objectives for water discharges and to define more water treatment programs that are economically and technically attainable, all with a constant concern for the protection of receiving watercourses. As a user, Cascades intends to ensure that the steps it and the paper industry take to protect watercourses are backed by similar efforts by other industrial, agricultural, and municipal users working on the same watersheds.

1. FOREST PRODUCTS ASSOCIATION OF CANADA, 2011

2. REGULATION RESPECTING PULP AND PAPER MILLS, RRQ (RPPM), C Q-2, R 27, S 28, 30.

3. PULP AND PAPER EFFLUENT REGULATIONS, LRC (1985), C F-14, (SOR/92-269), S 14.

QUALITY OF TREATED WATER











TARGET

0%

PERCENT ACHIEVED

80%

THE CAPACITY TO INNOVATE: A COMPETITIVE ASSET

n the current global context, a company must unequivocally adopt a rigorous approach of creativity and innovation management. The speed at which markets evolve should definitely not be underestimated, even in the commodity product sector.

The concept of innovation is far from new to Cascades. The proof: in the mid-1980s, the company established a research and development centre, which, over the years, has become the largest private research and development centre in the pulp and paper sector in Canada. The 40 or so employees who work there are specialized in fields as diverse as product design, machine operation, and paper chemistry. The Research and Development Centre is also active in launching projects to reduce water and raw material consumption to a minimum.

Although Cascades has always been on the lookout for new approaches, the openness of foreign markets, in particular in Asia, has prompted the company to find ways of reinventing itself, one step at a time.

DESCRIPTION OF THE INDICATOR

 $() \setminus A \mid () \setminus$

GOAL DESIGN AND MARKET

NEW PRODUCTS

In 2012, Cascades attained a volume of sales resulting from new products and innovations of 8%, a result slightly below the set objective of 10%. A product is considered new for a three-year period.

During the period covered by this first edition of the sustainable development plan, Containerboard Group (Norampac) organized its internal innovation management structure. Consequently, the sales calculation does not take its products into account.

INDICATOR

SALES RESULTING FROM NEW PRODUCTS AND INNOVATIONS MARKETED OVER THE PAST THREE YEARS / TOTAL SALES

> **TARGET** 10% PER YEAR

CASCADES: AMONG CANADA'S BEST IN RESEARCH AND DEVELOPMENT

Proof that research and development is a priority at Cascades, the company ranks 49th among businesses that invest the most in this sector, according to Canada's Top 100 Corporate R&D Spenders 2012 ratings prepared by Research Infosource Inc. Only three companies in the forestry product sector appear on the list, and Cascades is solidly first. The results are available online at researchinfosource.com.

RESEARCH AND DEVELOPMENT INVESTMENTS

	\$ MILLION		
	2010	2011	2012
RESEARCH AND DEVELOPMENT INVESTMENTS	35.2	43.3	42.4
% OF SALES	1.1	1.2	1.2

TOWARDS A STRUCTURED APPROACH TO INNOVATION MANAGEMENT

Everyone recognizes the importance of being innovative. However, it is important to structure approaches in this regard; otherwise, the results risk being inconclusive. In 2006, Cascades launched an analysis and reorganization of its innovation structure. An internal committee now has the responsibility of compiling and selecting ideas, developing them, and making strategic decisions. The Cascades Innovation Management Committee (CIMC) is composed of personnel from the company's various sectors: production, finance, services and logistics, human resources, and sales and marketing. It plays a key role in sustaining inter-group synergy, enhancing a culture of innovation and skills in innovation, passing on best practices, and catalyzing the involvement of all activity sectors.

The definition of innovation may vary from one company to another. At Cascades, the working group responsible for innovation has defined it as follows:

"NEW PRODUCTS CAN RESULT IN A SOURCE OF INCOME, BUT THIS DOES NOT NECESSARILY GUARANTEE THE COMPANY'S LONGEVITY. THE WORD 'SUSTAINABILITY' MUST BE ADDED





TO INNOVATION: SUSTAINABLE INNOVATION EQUALS SUSTAINABLE PROSPERITY." ROGER GAUDREAULT, MANAGER

OF SCIENTIFIC DEVELOPMENT, CASCADES

With this in mind, Cascades has incorporated a sustainable development filter into its innovation management system ensuring that the ideas selected respect sustainability criteria (environmental, social, and economic) before evolving into projects. For example, from an environmental perspective, the primary characteristics of innovation are the use of raw material with high recycled content, recourse to clean energy, the use of green chemistry, and the potential to recycle the product.

LISTENING TO CLIENTS

There are numerous occasions when innovations can be introduced simply by listening to clients. Paul Landry, Plant Manager, and Stephan Jacques, Accounts Manager, did just that when they rallied part of the Cascades Moulded Pulp (North Carolina) team, to quickly find a solution to a problem encountered by a major fast-food chain. In record time, the work team designed a cup holder to securely hold any type of drink container, preventing spills resulting from drive-through orders. To meet the client's request, the plant had to juggle its production schedule, a rather arduous challenge, but one brilliantly accomplished by the team in place.

Their efforts earned them two awards: the HAVI Global Solutions (HGS) – Supplier of the Year Award for 2012 and the prestigious System First Award, attributed by this restaurant chain in recognition of a supplier that has made exceptional efforts to prioritize its client's interests.



AN INNOVATION IS A NEW PRODUCT,¹ PROCESS AND/OR METHOD² THAT CREATES A COMPETITIVE EDGE FOR CASCADES AND IS A COMMERCIAL SUCCESS.

CHICAGO, NOVEMBER 2012 - STEPHAN JACQUES (ACCOUNTS MANAGER FOR THE SPECIALTY PRODUCTS GROUP) PROUDLY ACCEPTS THE SYSTEM FIRST AWARD BEHALF OF CASCADES MOULDED PULP, GIVEN AT THE 2012 U.S. SUPPLIER SUMMIT AWARDS.



 THREE CRITERIA DEFINE A NEW PRODUCT: IT CAN BE
A WORLD FIRST OR A PATENTED PRODUCT,
A NEW RANGE OF PRODUCTS, OR
A NEW PRODUCT FROM AN EXISTING RANGE INVOLVING A TECHNOLOGICAL CHALLENGE.

2. A NEW PROCESS OR METHOD CAN BE ORGANIZATIONAL, OPERATIONAL, RELATED TO MARKETING, ETC.

BRIEF OVERVIEW OF NEW PRODUCTS FROM ALL CASCADES GROUPS





Cascades[®] Antibacterial[™] Hand Towels, a simple and effective product that on contact with water releases an active ingredient that reduces the amount of residual bacteria on the hands and whose effect lasts for two hours.



The **Cascades Ultra** line of softer bathroom tissue (thanks to ATMOS technology), intended for the retail market.



Detachable felt backing for the manufacture of 100% PVC flooring.



Polystyrene foam trays (XPS) adapted to their product. This modified design requires 6% less raw material than a similar tray in rectangular shape.



Cascades **UltraFit™**, a four-cup beverage carrier for fast-food restaurants.



The **Cascades Elite** hygiene product line offering superior quality to establishments seeking such products.



Improvement to the Fine Papers Group's **digital printing product line**.



Flexicomb®, flexible protective packaging system that eliminates damage during transportation and handling.



EVOK[®] polystyrene foam, revolutionary because of its 25% recycled content.



The **Eco Bistro™** line, take-out food packaging made from recycled fibres.



The **Cascades® MOKA®** product line: bathroom and facial tissues made from unbleached recycled fibres.



Security papers from the Fine Papers Group, made from 100% recycled fibres and designed to combat fraud and the counterfeiting of cheques.



Cascades Re-Plast's **lumber** made of 100% recycled plastic, including 30% content from electronic components.



Cascades **Eko-Sens™**, plastic packaging for the food industry.



A **fruit basket** with a cardboard handle that replaces the traditional plastic handle (making recovery easier).

LIFE-CYCLE ASSESSMENT:

Innovation can take different forms. Through its association with the Interuniversity Research Centre for the Life Cycle of Products, Processes and Services (CIRAIG), an initiative of the École Polytechnique, Cascades has played a ground-breaking role by promoting the concept of life-cycle assessment (LCA) in the pulp and paper industry.

LCA is a sustainable development tool that enables the potential environmental impacts of a product, process, or service to be measured and quantified, considering all stages of its life cycle from cradle to grave. In more concrete terms, LCA takes into account the acquisition of resources (extraction, processing), the transportation of raw material, manufacturing (assembly, packaging), distribution (storage, handling, transportation), use (maintenance, repairs, reuse), and end-of-life management (recovery, recycling, repurposing, landfill). LCA enables Cascades to determine the environmental impacts of its products with a view to improving them, implementing ecodesign, or comparing different options (products, processes, raw materials, types of transportation, etc.) to guide its decision making.



SANDRA BOURRET, PROJECT MANAGER AT THE CASCADES RESEARCH AND DEVELOPMENT CENTRE, IS A SPECIALIST IN LIFE-CYCLE ASSESSMENT. TO HER, LCA IS A SCIENTIFIC TOOL THAT REVEALS THE ENVIRONMENTAL PERFORMANCE OF A PRODUCT AND HELPS AVOID GREENWASHING. **"BY DOING A LIFE-CYCLE** ASSESSMENT OF OUR PRODUCTS, WE ARE ABLE TO REDUCE THE ENVIRONMENTAL IMPACT AND TO STATE WHAT REALLY DIFFERENTIATES US FROM



THE MARKET BY RELYING ON A SCIENTIFIC APPROACH THAT IS RECOGNIZED INTERNATIONALLY."

FIRST SYMPOSIUM ON INNOVATION

In spring 2012, the Specialty Products Group organized its first in-house symposium completely devoted to innovation, with the theme "Innovation, the Road to Prosperity." Strategic directions and actions to be taken in the field were presented. The Antonio Award, named in honour of the father of the Lemaire brothers, was also created to HIGHLIGHT EXCELLENCE IN INTERNAL ENTREPRENEURSHIP AND INNOVATION INITIATIVES.













TARGET

PERCENT ACHIEVED

68%

INDICATOR

RETURN ON ASSETS: OPERATING **INCOME BEFORE** DEPRECIATION AND **AMORTIZATION** (OIBD) EXCLUDING SPECIFIC ITEMS / AVERAGE OF TOTAL ASSETS¹

> TARGET 12% IN 2012



n 2012, Cascades registered an OIBD excluding specific items of over \$304 million, i.e. an increase of 33% compared to 2011. Despite a significant decrease in the cost of recycled fibre, which had a positive impact on the company's results, the prevailing economic factors during the year negatively affected its financial performance. Difficult business conditions and strong competition are among the factors that contributed to a generalized decline in sales prices. The strength of the Canadian dollar, and operational challenges in some plants, also had a negative impact on Cascades' profitability.

THE FOUR PILLARS OF CASCADES' STRATEGIC PLAN:

IRUCTURF

S&P/TSX **Clean Technology Index** S&P/TSX

BMO

JSI 🕼 Index

CONSOLIDATED BASIS

SYMBOL CAS-TSX (on the Toronto

Stock Exchange)

Small Cap Index

Small Cap Index

Jantzi Social



FINANCIAL HIGHLIGHTS AT DECEMBER 31, 2012





In 2011, Cascades and its partners—the Caisse de dépôt et de placement du Québec, Jamestown Container, and another industry partner—announced the construction of Greenpac Mill LLC (Greenpac), a new high-tech containerboard manufacturing plant in Niagara Falls, New York.

At a construction cost of \$430 million, the Greenpac plant will produce lightweight linerboard from 100% recycled fibres with just one machine at a width of 328 inches (8.33 metres). The plant will employ 118 people, and its annual production capacity will be 540,000 tonnes.

THE LARGEST AND MOST SOPHISTICATED CONTAINERBOARD MANUFACTURING MACHINE IN NORTH AMERICA



"THIS MAJOR INVESTMENT —CASCADES' MOST SIGNIFICANT PROJECT—WAS UNDERTAKEN TO MAKE THE COMPANY A LEADER IN THE CONTAINERBOARD INDUSTRY."

MAURICE PLANTE, VICE-PRESIDENT,

BOXBOARD AND CONTAINERBOARD, NORAMPAC



WITH ITS HIGH-TECH PAPER MACHINE, GREENPAC WILL STIMULATE THE LIGHTWEIGHT LINERBOARD MARKET. CASCADES' PARTICIPATION IN THE PROJECT IS 59.7%.



P. 56

PLANT ACQUISITIONS DURING THE 2010-2012 PERIOD



PLANT CLOSURES AND SALES DURING THE 2010-2012 PERIOD

CONTAINERBOARD GROUP	SPECIALTY PRODUCTS GROUP	TISSUE PAPERS GROUP	
Leominster (Massachusetts)	Toronto (Ontario)	Scarborough (Ontario)	FOR FURTHER INFORMATION
Avot-Vallée (France)			ON CASCADES' FINANCIAL
Burnaby (British Columbia)			RESULTS, CONSULT
Le Gardeur (Quebec)			THE ANNUAL REPORTS
Versailles (Connecticut)			AVAILABLE ONLINE AT
Hebron (Kentucky)			CASCADES.COM/INVESTORS
North York (Ontario)			
Peterborough (Ontario)			BUILDING ON OWN
Mississauga (Ontario)			STRENDTHS AND VALUES
Lachute (Quebec)			
Dopaco (Pennsylvania)			

1. CASCADES NOW OWNS 57.61%.









2012



TARGET

20%

PERCENT ACHIEVED

s mentioned in Challenge 05 (see p. 39), the importance attributed to the supply chain principle and to product traceability is a relatively new phenomenon in North America. Businesses are progressively starting to be mindful not only of their own environmental record but also of their suppliers' practices.

Although this approach still remains the exception, Cascades regards its goal of increasing the number of suppliers with a sustainable procurement policy (SPP) as having been ambitious to say the least. During the period covered by this plan and in concert with the firm EcoVadis, Cascades established a system to assess each of its suppliers. Its suppliers must provide details on their procurement practices by answering questions like: Have you adopted a formal policy on sustainable purchases? What mechanisms are used to ensure your policy is applied? In what phase of implementation is your policy? What proportion of your suppliers has sustainable procurement measures in place? Despite the efforts made by certain suppliers to adopt sustainable procurement practices, the results demonstrate that this approach is uncommon in our activity sector.

CASCADES' PROCUREMENT STRATEGY

ROCUREMENT POLI

SUSTAINABLE

GOAL INCREASE THE NUMBER

PROCUREMENT POLICY (SPP)

OF SUPPLIERS WITH A SUSTAINABLE

During the 2010-2012 period, Cascades was in the process of developing its own. The company focused on this aspect before requiring that its suppliers do the same. In 2010 and 2011, Cascades drafted two sustainable procurement policies: one for the procurement of virgin fibre, and a second for goods and services and chemical products. In 2012, the company revised its strategy with the goal of including other purchasing categories, such as recycled fibre and energy, and also of incorporating the supplier assessment component, which was introduced in the second half of 2012, in conjunction with the firm EcoVadis. Final results are expected to be announced in autumn 2013.

Cascades plans to prepare a profile of the sustainable development practices of the organizations with which it works; its objective is to assess these organizations in terms of many factors, including not only their sustainable procurement strategy, but also their environmental, social, and ethical practices.

INDICATOR

PURCHASES FROM SUPPLIERS WITH AN SPP / TOTAL PURCHASES

TARGET 20% IN 2012



2010

2011

10 EMPLOYEES TRAINED

2012

40 EMPLOYEES TRAINED

TARGET

50%

PERCENT ACHIEVED

NOT ACHIEVED

INDICATOR

NUMBER OF EMPLOYEES WHO HAVE COMPLETED FOUR HOURS OF TRAINING ON SUSTAINABLE DEVELOPMENT / TOTAL NUMBER OF EMPLOYEES

> **TARGET** 50% IN 2012

EMPLOYEE AWARENESS GOAL RAISE EMPLOYEE AWARENESS OF SUSTAINABLE DEVELOPMENT

n 2011, with help from an outside firm, Cascades designed a four-hour training session on sustainable development. It planned to give this training, first of all, to all of its sales force and later to other staff members. Sales representatives were targeted because that would enable Cascades to achieve a double objective: raising employee awareness of sustainable development and encouraging customers to choose eco-friendly products.

A FEW OBSTACLES ALONG THE WAY

The goal of training 50% of staff was ambitious. Cascades had hoped to meet these people in small groups to facilitate discussion. For logistical reasons, the company chose instead to raise awareness of the issue by taking advantage of opportunities when groups were meeting.

İİİİİİİİİİİ M INDIVIDUALS IN 2012, IT GAVE THE TRAINING TO TWO OTHER GROUPS TOTALLING

IN 2011, CASCADES TESTED A TRAINING

SESSION WITH A GROUP OF



As for plant personnel working on regular shifts, freeing them up for a four-hour period proved to be difficult.



2010 29% 2011

29%

14%

TARGET

0%

PERCENT ACHIEVED

INDICATOR

NUMBER OF UNITS MEETING THE FOLLOWING THREE CRITERIA: OSHA INCIDENT RATE GOAL, CONTRIBUTION TO AN EMPLOYEE ASSISTANCE PROGRAM (EAP), AND FINANCIAL CONTRIBUTION TO A PHYSICAL ACTIVITY PROGRAM / TOTAL NUMBER OF UNITS

TARGET



PERCENTAGE OF PLANTS THAT MEET THE THREE CRITERIA

	2010	2011	2012
REACHING THE OSHA ANNUAL INCIDENT RATE GOAL	51%	50%	57%
CONTRIBUTION TO AN EMPLOYEE ASSISTANCE PROGRAM (EAP)	76%	87%	90%
FINANCIAL CONTRIBUTION TO A PHYSICAL ACTIVITY PROGRAM	68%	66%	74%

he Lemaire brothers are unequivocal: **Cascades' most important asset is its employees**. That's why employees' health, safety, and well-being are major concerns for the company.

For Cascades, three criteria define the health, safety, and wellbeing index:

REACHING THE OSHA ANNUAL INCIDENT RATE GOAL EMPLOYEE ASSISTANCE PROGRAM (EAP) PHYSICAL ACTIVITY PROGRAM



A recent French-language workplace health and safety awareness campaign used the slogan "On travaille pour gagner notre vie, pas pour la perdre" (we work to earn our living, not to lose it). Ensuring employees' health and safety is a matter of respect. Cascades makes every effort to implement various measures aimed at providing a healthy and injury-free work environment:

MAKING WORKPLACES SAFE

ESTABLISHING OPERATING RULES AND PROCEDURES

INSTILLING A SENSE OF PERSONAL RESPONSIBILITY IN MANAGERS AND EMPLOYEES The OSHA incident rate created by the American Occupational Safety and Health Administration is an index widely used in North America to measure the performance of companies with respect to employee health and safety. This rate represents the number of employment injuries that result in the loss of time or a temporary reassignment, or that require medical treatment, per 200,000 hours worked.

Through a concerted effort, the OSHA incidence rate hit an all-time low of 3.8 in 2012. Indeed, this rate improved by 12% from 2010 to 2011 and by another 12% from 2011 to 2012. Some of the means by which this was achieved include: smart investments to better control risk (e.g. making machines safer, protecting pedestrians in forklift areas, etc.), management programs (e.g. lockout and confined space procedures, forklifts), and, finally, by the development of a strong culture of accountability. Thus, management's policies combined with employees' efforts led to successful results. With this new data, we can conclude that Cascades has improved by 67% since 2002.

MATERIAL FOR REFLECTION

In 2012, Cascades partnered with Laval University's psychology department and sleep clinic (the Centre d'études sur les troubles du sommeil), participating in a study aimed at better understanding the causes of sleep apnea, a common problem among truck drivers. The study is continuing throughout 2013, and results will be available at a later date.



P. 60

"THE MANDATE OF THE CORPORATE SERVICES DEPART-MENT, SUCH AS ENGINEERING, MECHANICS, MAINTENANCE, AND ENERGY, IS TO OFFER THEIR EXPERTISE TO CASCADES' VARIOUS BUSINESS GROUPS. **OUR PRIORITY IS TO PROVIDE** FLAWLESS SERVICES TO THE PLANTS, BUT NEVER AT THE EXPENSE OF EMPLOYEES' HEALTH AND SAFETY. WE DO NOT WANT ANY ACCIDENTS TO OCCUR. ESPECIALLY NOT POTENTIALLY SERIOUS ONES LEADING TO SEVERE INJURIES. IT IS OUR DUTY TO TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SUCH

INCIDENTS." PASCAL AGUETTAZ, VICE-PRESIDENT, CORPORATE SERVICES, CASCADES



EXAMPLES OF MEASURES IMPLEMENTED BY CASCADES

MEASURES	GOALS
MACHINE SAFETY	Many investments have been made in order to protect employees from the dangers of machines without hindering their activities. The key to success has proven to be teamwork between the operators and engineers.
CASCADES' ACCOUNTABILITY MATRIX	The Accountability Matrix, a tool created by Cascades, allows managers and employees to jointly determine the level of maturity of their health and safety culture (Bradley Curve) ¹ . Developing a strong occupational health and safety (OHS) culture is a prerequisite for the long-term reduction of the number and seriousness of accidents in a sustainable way.
PEDESTRIAN SAFETY	Forklifts are a part of Cascades' everyday activities. Great efforts have been

Despite much improvement and diligent awareness-raising efforts, the extended Cascades family was shaken by two fatal workplace accidents during this three-year period. These tragedies involved an accident in a handling area at the Niagara Falls plant and another involving a forklift at the Saint-Jérôme Fine Papers plant.

made to protect pedestrians in forklift areas: access procedures, separate

pedestrian walkways, and awareness campaigns regarding the risk of collisions.

2 EMPLOYEE ASSISTANCE PROGRAM (EAP) 3 PHYSICAL ACTIVITY PROGRAM

"THE INCIDENTS MOST OFTEN REPORTED ARE THOSE INVOLVING THE USE OF FORKLIFTS. IN 2012, 43% OF EVENTS POTENTIALLY RESULTING IN DEATH OR PERMANENT INJURY WERE RELATED TO THE USE OF FORKLIFTS. PEDESTRIAN SAFETY AROUND FORKLIFTS AND SAFE FORKLIFT DRIVING HABITS REMAIN TOP PRIORITIES

FOR THE COMING YEARS." KRISTEL DE CAT, CASCADES' HEALTH AND SAFETY COORDINATOR



A HEALTHY MIND IN A HEALTHY BODY TRANSLATES AS

HEALTHY FROM HEAD TO TOE.

From head... Cascades' Employee Assistance Program, which is geared toward employees as well as their spouses and dependent children, enables them to obtain quality care in the case of personal, family, or professional problems.

AROUND FORKLIFTS

...to toe. Cascades also places great importance on its em-

ployees' physical fitness. The company organizes sports tournaments, and some plants offer subsidies to cover employees' sport activities, all with the goal of promoting a healthy and active lifestyle. Cascades distributes to all its employees the *InfoHEALTH Bulletin (L'Informateur Santé)*, a monthly newslet-

ter dealing with a different topic each month: healthy eating, stress management, blood pressure, heat exhaustion...This newsletter is put together by Cascades' nurse and physical education coordinator, both based in Kingsey Falls (Quebec).



P. **61**

1. VERNON BRADLEY (DUPONT PLANT WORKER)

DETAILS ON THE CALCULATION METHOD

IN ORDER TO REACH ITS GOAL, EACH PLANT MUST HAVE MET THE THREE CRITERIA.

Although the OSHA incidence rate decreased significantly between 2010 and 2012, Cascades' calculation was based on the number of plants that met their OSHA goal set during the strategic planning period.

IN 2012, <u>57 PLANTS</u> REACHED THEIR TARGET, WHICH

VARIED BETWEEN O AND 5.5.

Overall, this result is not representative of the work accomplished. Several plants lowered their accident rate without, however, achieving the desired result. The calculation should have been based on the number of plants that improved their rate, the ultimate goal being to achieve the lowest rate possible.

This exercise allowed Cascades to gain a clear picture of which of its units offered an Employee Assistance Program and a physical activity program. Previously, the company had no data concerning these aspects.

THE RESULTS CONFIRMED THAT VIRTUALLY (90%) OFFER AN EAP,

but that physical activity programs were much less common. There is, therefore, room for improvement in this area.

CASCADES VIS-À-VIS THE INDUSTRY



It is impossible to make industry-wide comparisons with respect to this specific goal, since it is an amalgamation of three indexes created internally. It was, however, possible to learn that the overall rate of reportable incidents (number of accidents per 100 employees) in the pulp and paper industry decreased:





P. 62

1. FOREST PRODUCTS ASSOCIATION OF CANADA, 2011









TARGET

PERCENT ACHIEVED

"WE WANT TO GET INVOLVED AND DO MORE FOR OUR EMPLOYERS WHEN THEY KNOW HOW TO FOSTER A SENSE OF BELONGING AND OF PRIDE. IT'S NO SURPRISE THAT THE MANAGEMENT APPROACH OF CASCADES' LEMAIRE BROTHERS HAS BEEN PIC-KED APART AND STUDIED IN UNIVERSITIES AROUND THE WORLD; RESPECT [...] AND HONESTY MAKE FOR

A WINNING STRATEGY ACROSS THE BOARD, ESPECIALLY IN THE LONG TERM." VALÉRIE CUSSON, MONTREAL (QUEBEC)

Valérie is a paper specialist with the Fine Papers Group. She left this comment on Radio-Canada's Web site following a report whose topic was "Secrets of good employers." She authorized publication of the comment in this document.

CORPORATE CULTURE

GOAL INCREASE EMPLOYEE

COMMITMENT LEVEL

A company's culture is, in a sense, its genetic code. It's an amalgamation of the company's shared values and its approach to problem-solving. It's a climate, an atmosphere, a way of interacting with employees.

There are many "top employer" rankings, and Cascades performs well in several of them (see the Awards and Distinctions section, p. 74). Few of these ranking systems, however, take into account employees' opinions in an effort to evaluate their level of appreciation of their workplace.

A study conducted specifically on this topic has attracted our attention over the past few years: the "Best Employers in Canada" ranking by Aon Hewitt, a human resources management consulting firm. This study is the only one of its kind in Canada that seeks to collect the opinions of organizations' employees and managers, with the goal of identifying the chief priorities that promote mobilization and performance.

INDICATOR

COMMITMENT LEVEL ACHIEVED FOLLOWING AN OPINION SURVEY DISTRIBUTED TO EMPLOYEES

> **TARGET** 75%





EMPLOYEES SPEAK THEIR MINDS

EXHIBIT THREE BEHAVIOURS:

In 2009 and 2012, Cascades invited its employees to complete an online survey aimed at collecting their opinions on various topics and business practices, such as quality of life, values, resources, work-related tasks, overall compensation, recognition, career outlook, learning opportunities and skills development, human resources procedures, and other people within the organization. The results of the study allow a comparison of employers and serve as a basis for drafting action plans.

EMPLOYEE MOBILIZATION

"A STIMULATING WORK ENVIRONMENT ATTRACTS QUALITY EMPLOYEES, AND QUALITY EMPLOYEES DRIVE THE COMPANY TO OFFER A STIMULATING WORK ENVIRON-

MENT IN ORDER TO RETAIN THEM." MARYSE FERNET, VICE-PRESIDENT, HUMAN RESOURCES, CASCADES



SAY: THEY SPEAK OF THE ORGANIZATION IN POSITIVE TERMS.

ACCORDING TO AON HEWITT, "COMMITTED" EMPLOYEES

STAY: THEY DISPLAY A STRONG DESIRE TO REMAIN WITHIN THE ORGANIZATION.

MARYSE GOES ON TO DEFINE A STIMULATING WORKPLACE AS FOLLOWS:

- One in which employees understand, as they begin their shift, the contribution expected of them and in which, at the end of their shift, they have a sense of having accomplished what they set out to do.
- One with which employees are proud to identify and to which they are proud to belong.
- · Where learning opportunities are available.
- · Where employees' skills are called upon.

In order to continue to thrive, Cascades must keep its committed employees on board (retention) and attract highly qualified new employees (recruitment). Providing a stimulating workplace to which employees feel a great sense of belonging will surely prove to be the key to success in this regard.

STRIVE: THEY SEEK TO OUTDO THEMSELVES IN ORDER TO MEET THE ORGANIZATION'S GOALS.

In 2009, the survey was distributed to a representative sample of plants and employees in Canada, and our respondent pool included about 1,000 employees. In 2012, for the first time, we decided to look at the big picture for Cascades in North America by broadening the survey's reach to include staff across the continent.

In doing so, Cascades knew its results would be different, since its baseline reference was no longer the same. The target set was not reached, and the mobilization index decreased compared to the previous survey. This result can be chalked up to several factors, including—naturally—conditions internal to the company, but also the socio-economic context. In this respect, the year 2012 was difficult on several levels. Generally speaking, the index was higher in service units than in manufacturing plants, the latter facing different challenges: order backlogs, operational realities, fixed work schedules, etc. To sum up, the survey allows us to identify areas of possible improvement and to establish action priorities in order to respond to employee concerns and to maintain favourable conditions for employees.



AWARENESS AMONG CLIENTS GOAL INCREASE CLIENT AWARENESS OF SUSTAINABLE DEVELOPMENT

o expand the scope of its actions, Cascades must inform its clients about the sustainable nature of its products and services. Since sales representatives are our main interface with the market, special training was designed to equip sales and marketing teams and to develop their expertise in sustainable development to ensure they use it in meetings with clients.

As with the employee training challenge (Challenge 12), this goal was ambitious, and its accomplishment had its share of limitations. Fifty sales representatives received four hours of training on sustainable development, which represents 14% of the target group. According to a non-exhaustive survey, it's estimated that sustainable development was discussed in 210 meetings with clients. Without an official system for compiling this data, the values given are estimates, but they indicate that the goal was achieved.

USEFUL TOOLS LIFE-CYCLE ASSESSMENT (LCA)

Cascades uses the results of life-cycle assessments to explain the benefits of its products. To date, two lifecycle assessments of products or group of products have been published: a first that compares different types of food packaging produced and a second on fine papers.

Reports of these assessments are available at: CASCADES.COM/EN/SUSTAINABLE-DEVELOPMENT.



I

2010

2011

()

2012

210

TARGET

200

PERCENT ACHIEVED

105%

INDICATOR

NUMBER OF PRESENTATIONS MADE TO CLIENTS (NUMBER OF REPRESENTATIVES TRAINED X 20)

> TARGET 200 CLIENTS IN 2012

USEFUL TOOLS

THE ECOCALCULATOR

Cascades has equipped itself with the Ecocalculator, a unique and innovative tool to measure environmental savings in paper and carton products from each of the company's groups (fine paper, tissue paper, and packaging). SAVINGS ARE MEASURED BY <u>COMPARING 100% VIRGIN PRODUCTS AGAINST 100%</u> <u>RECYCLED PRODUCTS</u> from the North American industry average. Six indicators are used: trees, water, waste, greenhouse gases, energy, and smog. Cascades encourages its clients to calculate their footprint or the footprint made by one of their projects. They can then understand the environmental savings that come from choosing Cascades products, and they can communicate the information internally and externally.

CASCADES.COM/CALCULATOR

Company name: Cascades	PAGE 1 OF 1
LIST of products used. 5,040 bigs of Railand Envis 100 Digital Satin	RESULTS Based on the Cascades products you selected compared to products in the industry made with 10th virgin fiber, your savings are:
100% post-consumer	43 yees 3 Iannia courts
Generated by : www.cascades.com/calculator Sources : Environmental Paper Network (EPN) www.papercalculator.org	156,438 L of water 417 days of water consumption
	1,918 kg of waste 29 waste containers
	6,301 kg CO2 emissions of 2 cars per year
	38 GJ 1773,549 50W light bulbs for one hour
	B kg NOx emissions of one truck during 25 days



P. **66**

FOR EXAMPLE, BY CHOOSING TO PRINT 10,000 COPIES OF A 8.5X11, 48–PAGE MAGAZINE ON 100% RECYCLED PAPER RATHER THAN ON VIRGIN PAPER, AN ORGANIZATION IS SAVING:¹



1. SOURCES OF RESULTS ARE AVAILABLE AT CASCADES.COM/CALCULATOR



MEMBERS OF CASCADES' MANAGEMENT TEAM AND SUSTAINABLE DEVELOPMENT STEERING COMMITTEE SERVE ON VARIOUS SECTOR COMMITTEES WHOSE MANDATE IS TO INFLUENCE DECISIONS AND ADVANCE SUSTAINABLE DEVELOPMENT METHODS. THE MEETINGS HELD HAVE INVOLVED ENVIRONMENTAL ORGANIZATIONS, GOVERNMENT DEPARTMENTS, FOUNDATIONS, INDUSTRY REPRESENTATIVES, AND ACADEMICS. **THE TARGETED NUMBER OF MEETINGS WAS EASILY SURPASSED IN 2011 AND 2012**, DEMONSTRATING THAT KEY EMPLOYEES IN THIS PROCESS WERE VERY ACTIVE OUTSIDE THE COMPANY.

INDICATOR

NUMBER OF MEETINGS WITH DECISION-MAKERS PER YEAR

SOME OF THE COMMITTEES ON WHICH CASCADES REPRESENTATIVES SERVE:

Association forestière des Cantons-de-l'Est Association québécoise pour la maîtrise de l'énergie (AQME) Association québécoise des consommateurs industriels d'électricité (AQCIE) Association of Independent Corrugated Converters (AICC) Association Nationale des Grands Usagers Postaux (ANGUP) Book Industry Environmental Council (BIEC) Centraide Centre-du-Québec (United Way) Centre d'excellence en efficacité énergétique (C3E) Chaire de responsabilité sociale et de développement durable (École des sciences de la gestion – Université du Québec à Montréal (ESG-UQÀM)) Organisme de concertation pour l'eau des bassins versants de la rivière Nicolet (COPERNIC) Conseil de l'industrie forestière du Québec (comités environnement et affaires publiques) Conseil patronal de l'environnement du Québec (CPEQ) Corporation du développement durable (CDD) **Global Green USA** Éco Entreprises Québec (ÉEQ) Écotech Québec (la grappe des technologies propres au Québec) Fédération des chambres de commerce du Québec (FCCQ) Fibre Box Association (FBA) Food Packaging Institute (FPI) International Corrugated Packaging Foundation (ICPF) International Corrugated Case Association (ICCA) Jeune Chambre de commerce de Montréal (JCCM) Manufacturiers et Exportateurs du Ouébec National Paper Trade Association (NPTA) **Ontario Forestry Industry Association** Paper Packaging Canada (PPC) Packaging Association of Canada (PAC) Paper Recycling Council (PRC) PAPTAC (Pulp and Paper Technical Association of Canada) Programme d'action pour la consommation tranquille (PACT) Recycled Paperboard Alliance (RPA-100) Recycled Paperboard Technical Association (RPTA) Regroupement des jeunes gens d'affaires du Québec (RJGAQ) World Containerboard Organization (WCO) and the chambers of commerce in several regions where Cascades has facilities

A FEW OF CASCADES' INITIATIVES AND INVOLVEMENTS:



P. **68**

PARTICIPATION WITH OTHER CANADIAN DECISION–MAKERS ON A NATIONAL ROUNDTABLE ON THE ENVIRONMENT AND ECONOMY ORGANIZED BY THE GOVERNMENT OF CANADA

DISCUSSIONS WITH THE QUEBEC MINISTRY OF TRANSPORTATION TO EXAMINE THE FEASIBILITY OF ALLOWING DOUBLE ROAD TRAINS ON SMALLER HIGHWAYS

> PARTICIPATION IN A TEST PILOTED BY THE QUEBEC MINISTRY OF TRANSPORTATION ON DOUBLE ROAD TRAINS TRAVELLING IN WINTER

BRIEF SUBMITTED IN NOVEMBER 2011 TO THE QUEBEC MINISTRY OF THE ENVIRONMENT, SUSTAINABLE DEVELOPMENT, AND PARKS REGARDING A BILL ON A CAP-AND-TRADE SYSTEM









2012



TARGET

400

PERCENT ACHIEVED

222%

DIALOG WITH STAKEHOLDERS GOAL COLLABORATE TRANSPARENTLY WITH STAKEHOLDERS

ollaboration with stakeholders was the starting point for Cascades' first sustainable development plan. In 2009, the company consulted several groups of stakeholders (employees, clients, suppliers, non-governmental organizations, etc.) to determine and prioritize the challenges it wanted to overcome. Collaboration with civil society at large followed in the form of conferences, discussions, and participation at roundtables with various players (industry, clients, suppliers, students, citizens, non-governmental organizations, etc.). The number of persons consulted corresponds to the number of persons in attendance at these events.

THE LIST OF COLLABORATIVE INITIATIVES IS NOT EXHAUSTIVE, BUT THE TARGET SET FOR **THIS CHALLENGE WAS MORE THAN ACHIEVED**.

THE SOCIAL MEDIA LAUNCH

Cascades made its entrance into the world of social media in February 2012 to keep its stakeholders more regularly informed of its sustainable development initiatives and to create opportunities for dialogue. In addition to Cascades' Facebook, Twitter, LinkedIn, YouTube, and Pinterest accounts, a blog with details on projects and current events was created.



INDICATOR

NUMBER OF PERSONS CONSULTED AND MET PER YEAR

TARGET

400



2010



2012

TARGET

PERCENT ACHIEVED

116%

INDICATOR

NUMBER OF UNITS THAT CONTRIBUTED TO AT LEAST TWO COMMUNITY **ACTIVITIES DURING** THE YEAR / TOTAL NUMBER OF UNITS

CASCADES, GENEROUS BY NATURE

\$ MILLION

ommunity involvement has been part of Cascades' values since it started in 1964. The company has always fully assumed its role as a good corporate citizen by investing significant amounts in the form of donations and sponsorships. The company's leadership is no stranger to this approach: the Lemaire brothers take a personal interest in supporting organizations that serve the communities in which Cascades operates.

AMOUNT INVESTED IN COMMUNITIES

BY ALL CASCADES UNITS

2010

3.7

2011

3.6

Cascades established a geographical condition for its management of donations and sponsorships: the organizations requesting support must have an impact in the communities where the company works. We believe that for employees balance in life depends on healthy work habits as well as a healthy and enjoyable living environment.

The list of community activities in which all of Cascades' North American units were involved in the past three years shows that:

> OF THEM INVESTED IN ONE CAUSE AND WERE INVOLVED IN AT LEAST TWO CAUSES.



MUNITY

OLVEMENT

GOAL INCREASE THE NUMBER

OF UNITS INVOLVED

2012

2.8

IN THEIR COMMUNITY



SOCIALLY COMMITTED EMPLOYEES

Each year, several dozen employees participate in the 12-hour Relay for Life walk for the Canadian Cancer Society, the Light the Night walk for the Leukemia & Lymphoma Society of Canada, and the CIBC Run for the Cure in support of the Canadian Breast Cancer Foundation. Cascades supports them with donations.



ONCE NOVEMBER COMES AROUND, DOZENS OF CASCADERS ARE KEEN TO GROW A MUSTACHE FOR PROSTATE CANCER AWARENESS, ONE OF THE MOST COMMON CANCERS AMONG MEN.

SOCIO-HEROES: PEOPLE WITH HEART



To honour its many employees who give countless and committed hours as volunteers, in 2012 Cascades created the Socio-Heroes contest to recognize employees who are devoted to one or more causes. Three people have earned the honour: Joseph Boachie (Norampac – Mississauga), Johanne Fournier (Tissue Group – Candiac), and Cheryl Hicks (Cascades Auburn Fiber). As a reward, the recipients receive \$1,000 to donate to the organization of their choice. Our blog (blog.cascades.com) tells their story.

INSPIRING PARTNERSHIPS

Operation Enfant Soleil, Leucan, the Parkinson Society, the Maisonnee des enfants, the TEEG Foundation, the Care Foundation. Sponsoring the Adopt a Family for Christmas program, the Special Olympics, the Salvation Army, hospital foundations, teaching institutions, suicide prevention organizations, sports teams, local community support groups... ... Hundreds of organizations can count on Cascades' support every year in various ways: products, financial donations, and volunteer time.

> MARIO PLOURDE, CASCADES PRESIDENT AND CEO, WITH YOUNG ROSE, THE GIRL HE SPONSORED DURING THE 2010 AND 2011 CIBC CHARLES-BRUNEAU TOURS.



EMPLOYEES OF TISSUE GROUP - CANDIAC DURING THE 16TH DENIM DAY IN SUPPORT OF THE CURE FOUNDATION.

LEMAIRE FAMILY FOUNDATION

IN ADDITION TO ALL THE COMMUNITY ACTIONS TAKEN BY CASCADES, ITS UNITS, AND ITS EMPLOYEES, THE LEMAIRE FAMILY FOUNDATION, WHICH WAS CREATED IN 2002 BY THE THREE BROTHERS, GAVE **\$3 MILLION** BETWEEN 2010 AND 2012 TO **40 ORGANIZA-TIONS AND INSTITUTIONS** WORKING MAINLY IN HEALTH AND EDUCATION.



CYCLING FOR A GOOD CAUSE

At Cascades, we know all about bike tours for a good cause! The Charles Bruneau CIBC Tour for the Fondation Charles-Bruneau, the Grand Défi Pierre Lavoie with its mission to encourage youth to CATHERINE MYRAND, FABRICE PACCOU, STÉPHANE GEORGE, LOUIS LEMAIRE, ERIC DAVIGNON, AND PATRICK RAVARY, NORAMPAC AND INFORMATION TECHNOLOGY CENTRE EMPLOYEES, PROUD COMPANY REPRESENTATIVES AT THE GRAND DÉFI PIERRE LAVOIE.

adopt healthy life habits, and the Granfondo Garneau-Cascades for the Petits Frères are sports events in which dozens of Cascades employees participate each year. This is an excellent way to bring sports challenges and community causes together.



WORKING TOGETHER

Centraide/United Way is the number one cause for Cascades and its employees. Coming from a modest background, the Lemaire brothers understand people in need and have been repeating their annual support for the organization without hesitation for several years. Each fall, a number of Cascades employees become campaign managers for a few weeks and show their ingenuity in gathering funds for the organization and its regional branches. Cascades gives \$0.50 for each dollar donated by its employees solid support that amplifies individual donations.





MANAGERS OF THE INTERNAL FUNDRAISING CAMPAIGN FOR CENTRAIDE CENTRE-DU-OUÉBEC PROUDLY DONATED THE RECORD AMOUNT OF \$267,000 FOR THE 2012-2013 CAMPAIGN.

CASCADES ATHLETES SHINE AT THE OLYMPIC GAMES

In winter 2010, Cascades saw six of the athletes it sponsored participate in the Vancouver Olympics: Alexandre Bilodeau and Pierre-Alexandre Rousseau (freestyle skiing-moguls), Alex Harvey (cross-country skiing), Jean-Philippe Le Guellec (biathlon), and Jessica Dubé and Bryce Davison (figure skating). Alexandre Bilodeau gave all Cascaders a great thrill when he won Canada's first gold medal. At the 2012 Summer Olympic Games in London, the eyes of Cascades' employees were riveted on Kathy Tremblay (triathlon) and on Émilie and Hugues Fournel (canoe-kayak). Roughly 20 other sports are represented on the list of athletes supported by Cascades through its partnership with the Fondation de l'athlète d'excellence du Québec. These athletes are both excellent examples of perseverance and outstanding ambassadors for the company.



MOGUL SKIERS PIERRE-ALEXANDRE ROUSSEAU AND ALEXANDRE BILODEAU AND CROSS-COUNTRY SKIER ALEX HARVEY, WITH THE LEMAIRE BROTHERS LAURENT, BERNARD, AND ALAIN, AT CASCADES' ANNUAL GENERAL MEETING IN MAY 2010, THEY ARE HOLDING THE OLYMPIC GOLD MEDAL WON A FEW MONTHS EARLIER BY ALEXANDRE BILODEAU.

WE RECYCLE ALL FIBRES—EVEN OUR CLOTHES 00000 10 10 -0 34

EMPLOYEES WEARING

companies that might be inspired by Cascades' practices.

RECYCLED CLOTHES

In 2012, Cascades began working with Certex, a non-profit social enterprise that recycles used textiles, clothes, and shoes. It has a dual mission: in addition to giving a second life to thousands of tonnes of textiles each year. Certex also fosters the social-professional integration of more than 100 people with functional limitations. For its partnership with Certex, Cascades set up textile recuperation bins outside seven of its plants in Quebec.



CLAUDETTE SIMONEAU. CORPORATE TECHNICIAN

IN ADMINISTRATION FOR

CASCADES, DURING THE

ETHICAL FASHION SHOW IN

MONTREAL IN OCTOBER 2012.





INVOLVEMENT

P. 72

IN KINGSEY FALLS, QUEBEC-CASCADES' BIRTHPLACE—SEVERAL ORGANIZATIONS WITHIN THE COMPANY'S COMMUNITY HAVE BEEN ABLE TO BENEFIT FROM THE EXPERTISE AND INGENUITY OF THE ENERGY ACTION GROUP FREE OF CHARGE TO REDUCE THEIR ENERGY COSTS.

CASCADES.COM/PROFILE/GOVERNANCE

FOR DETAILS ON CASCADES' CHARTERS, GOVERNANCE PRACTICES, BOARD OF DIRECTORS, CODE OF ETHICS, MAJORITY VOTING POLICY, AND BOARD COMMITTEES, SEE THE COMPANY'S WEB SITE AT

AWARDS AND DISTINCTIONS

AWARDS AND DISTINCTIONS

P. 74

YEAR AFTER LE PRIX **CASCADES LEADERS CASCADES** PULP PAPER DD YEAR, DISTINGUISH PRODUCTS AWARDS2012 VERT 2012 THEMSELVES WIN AWARDS CASCADES IS 2012 RECOGNIZED Alain Lemaire, Executive Chairman of the Board, Pulp & Paper International (PPI) awarded was named PDG VERT 2012 (greenest CEO) the Cascades Fine Papers Group with the prize for innovative FOR ITS in the large corporation category of a competition organized product of the year for its latest creation: by the Groupe Les Affaires and the firm Trebora Conseil. the CheckSecur Platinum Enviro[™]. DISTINCTIVE METHODS. THE FOLLOWING 2012 IS A LIST OF PRIZES EARNED IR MAGAZINE rewarded Cascades with the <u>Grand Prix</u> IN THE PAST of Best Relations With Investors in the small-cap category. THREE YEARS. Cascades GIE Inc. received an honourable *mention in the integrated management category* énergia at the AOME (Association guébécoise pour la maîtrise de l'énergie) ÉNERGIA GALA. Cascades' performance was recognized in three categories of the prestigious LES MERCURIADES awards: investment innovation Quebec, sustainable development, and company of the year. Cascades was recognized as the 15th best corporate citizen in Canada by



nr randstad

Cascades is one of the *most attractive employers in Canada* according to RANDSTAD.

CORPORATE KNIGHTS magazine.



Clean16

AWARDS AND DISTINCTIONS

P. **75**

MACLEAN'S magazine ranks Cascades among the <u>50 most socially responsible companies in Canada.</u>

Carl Blanchet, Corporate Director of Innovation and Sustainable Development, was given the CLEAN50 AND THE CLEAN16 awards in the <u>manufacturing and transportation category</u>. These honours highlight Cascades' leadership in sustainable development.

Cascades was the proud recipient of a 2012 GREEN SUPPLY CHAIN AWARD highlighting its responsible supply practices.

For the second year in a row, Cascades is the most responsible company and brand in the eyes of Quebecers, according to the <u>Responsible Consumption Index</u> carried out by the magazine PROTÉGEZ-VOUS and THE OBSERVATOIRE DE LA CONSOMMATION RESPONSABLE (ESG-UQÀM, Université de Sherbrooke).

2011



e antie

Cascades is proud to have been recognized as the <u>seventh best corporate citizen in Canada</u> by $CORPORATE\ KNIGHTS.$

Cascades won the <u>Greening of the Supply Chain prize</u> in the prestigious CATIE contest, organized by the CANADIAN ASSOCIATION OF IMPORTERS AND EXPORTERS.





cascades won the CORPORATE SOCIAL RESPONSIBILITY prize for its <u>exemplary practices.</u>

Cascades is proud to have won the EXCELLENCE IN CORPORATE RESPONSIBILITY prize, awarded for its online boutique, which offers *innovative and environmentally respectful products.*



AWARDS AND DISTINCTIONS

P. 76

Cascades is the *most responsible company and brand* in the eyes of Quebecers, according to the RESPONSIBLE CONSUMPTION INDEX.

Cascades GIE Inc. (the Energy Action Group) won the Leadership Award from the CANADIANINDUSTRY PROGRAM FOR ENERGY CONSERVATION in the category for implementation of an integrated energy efficiency strategy.



Cascades received the Grand Prix for Best Relations With Investors in the mid-cap and forest products categories, awarded by IR MAGAZINE. CANADA AWARDS.



Cascades was ranked 11th among the most admired companies by Quebecers, a list created by LÉGER MARKETING in cooperation with the magazine LES AFFAIRES advancing nine places from the previous year.



TOP 50

MACLEAN'S

CORPORATE KNIGHTS magazine recognized Cascades as the 47th best corporate citizen in Canada.

Cascades is among the 50 most responsible companies in Canada according to JANTZI RESEARCH'S 2010 list and MACLEAN'S.



Highlighting the best remuneration programs, the ninth KORN/FERRY-LES AFFAIRES contest rewarded Cascades for the excellence of its governance program, in the large corporation category.

AN ENVIRONMENTALLY RESPONSIBLE APPROACH WAS ADOPTED FOR THE PRODUCTION OF THIS DOCUMENT.

THE DESIGN reduces the quantity of ink required in printing.

IF YOU NEED TO PRINT THIS DOCUMENT, use paper from our 100% post-consumer line.

 $\mathsf{PRODUCTION}: \textbf{Sustainable Development Department, Cascades Inc}$

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THE 2013–2015 SUSTAINABLE DEVELOPMENT PLAN IS AVAILABLE AT CASCADES.COM/SUSTAINABLE-DEVELOPMENT

FOLLOW CASCADES ON SOCIAL MEDIA



