

Trans

Corporate
Responsibility
Report

} What's behind our performance?

It's not just about the numbers



It's more than keeping records





* { It's about the people behind it all

A close-up portrait of a woman with dark hair and green eyes, smiling warmly. She has a small nose ring. The background is a soft, out-of-focus brown.

It's about the
people working
hard to make a
positive impact.



ABOUT THIS REPORT

At Capital Power, we are proud of our people, our operations and our performance. Building upon our inaugural 2009 report, we aim to be clear and concise in providing accurate and balanced information about who we are – **people**, our facilities and the communities in which we operate – **places**, and our **performance**.

GLOBAL REPORTING INITIATIVE

This report follows guidelines defined in the Global Reporting Initiative (GRI), an internationally recognized standard for corporate responsibility reporting. The GRI guidelines set out the principles and indicators organizations can use to measure and report their environmental, economic and social performance. More information about the GRI is available at www.globalreporting.org.



Any reference to Capital Power in this report means Capital Power Corporation together with its subsidiaries on a consolidated basis, including its interest in Capital Power L.P. (CPLP) and Capital Power Income L.P. (CPILP), except where otherwise noted or where the context otherwise indicates. Any reference to CPILP, a publicly-traded limited partnership in which CPLP indirectly has approximately 29.6% interest as at December 31, 2010, means CPILP and its subsidiaries on a consolidated basis, except where otherwise noted or where the context otherwise indicates. Subsidiaries of Capital Power operate and maintain CPILP's 20 power plants.



REPORTING LEVEL

We believe we have achieved an A+ level of reporting under the GRI guidelines.

ADDITIONAL INFORMATION

This icon appears next to topics throughout the printed report to indicate that further information is available online at:

www.capitalpower.com



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QUESTIONS OR COMMENTS

Feedback and questions are welcomed. Contact Capital Power at:



info@capitalpower.com

Capital Power External & Investor Relations
9th floor, 10065 Jasper Avenue
Edmonton, AB, Canada T5J 3B1



Capital Power's Edmonton offices are moving in Fall 2011. Our new address will be:

Capital Power External & Investor Relations
Suite 1200, 10423 – 101 Street NW
Edmonton, AB, Canada T5H 0E9

VISION Our vision is to be recognized as one of North America's most respected, reliable, and competitive power generators.

MISSION Our business is the development, acquisition, construction, operation, and optimization of large-scale, fuel-diverse, cost-effective power generation facilities in North America.

Established in July 2009 and headquartered in Edmonton, Alberta, Capital Power (CPX:TSX) is a growth-oriented North American power producer that develops, acquires, and operates power generation from a diverse range of energy sources. We plan to grow to **10,000 megawatts** of owned and/or operated generation capacity by 2020 with the help of our dedicated team of approximately **1,047 employees**.

As of December 31, 2010, Capital Power had interests in **32 facilities** across North America, with a total generation capacity of approximately 3,800 megawatts, and 495 megawatts under construction or in development. We also owned 371 megawatts of capacity through Power Purchase Arrangements in Alberta in 2010.

Energy was produced from a diverse range of energy sources, including coal, natural gas, wind, hydro, biomass, and waste heat energy in Canada and the United States.



For information on Capital Power's Initial Public Offering (IPO), see pages 7 to 10 of Capital Power's 2009 Annual Information Form (AIF). Both documents can be downloaded from sedar.com or capitalpower.com.



1,047
EMPLOYEES



32
FACILITIES ACROSS
NORTH AMERICA



10,000
MEGAWATTS BY 2020
IS OUR GROWTH PLAN



PEOPLE
PLACES
PERFORMANCE

HIGHLIGHTS

522 MEGAWATTS

Approximately \$1 billion was committed to capital growth opportunities. A new power generation facility (Island Generation) was acquired, and we won two long-term wind power contracts. The three projects will add 522 megawatts of power generation capacity to the company's fleet.

bronze LEVEL

We received the bronze-level Canadian Electricity Association President's Award for top quartile safety performance for 2010.

\$7.3 MILLION

More than \$7.3 million in permanent cost reductions were achieved thanks to employee-led initiatives.

90%

Capital Power's plants, excluding CPILP plants, averaged 90% operating availability thanks to a well-maintained fleet.

SUCCESSFUL FINANCINGS

Ongoing access to capital markets facilitated debt offerings, a secondary share offering, and the launch of preferred shares.



110,000 SEEDLINGS

Approximately 110,000 Spruce, Aspen and Willow seedlings were planted as part of our innovative land reclamation program as we continued efforts to find ways of increasing biodiversity and sustainability.

100 DAYS

A new Employee Orientation program was introduced to give new employees a 'Strong Start' in their first 100 days of work.

50%

We involved First Nations in the initial construction phase of the Quality Wind Project, with Aboriginal businesses providing more than half the total construction work hours in 2010 and through early 2011.

100%

An updated Ethics Policy received a 100% response rate from employees certifying that they had read and understood it.

\$1 MILLION

Through our community investment program, we invested nearly \$1 million in Edmonton and the communities where we operate.

On behalf of all of us at Capital Power, thank you for taking the time to read our 2010 corporate responsibility report. This report reflects our core values, our priorities, and our commitment to transparency. As a corporation, we seek to achieve our vision in a way that takes into account the needs and interests of employees, shareholders, communities, regulators, governments, environmental organizations, and other stakeholders.



In 2010, we adopted five corporate values to help guide our behaviour, and these values continue to be communicated and embraced throughout our organization.

We believe that consistently living these values will continue to bring us closer to our corporate vision of being recognized as one of North America's most respected, reliable, and competitive power producers. **We strive to ensure that our values remain top of mind every day, and in everything we do.**

WE ARE PASSIONATE ABOUT OUR BUSINESS AND SAFETY

At Capital Power, we have one line of business and focus – **safe, reliable power generation**. The safety of our employees and communities comes first, and we have set ambitious targets for safety performance based on our goal of achieving a zero-injury safety culture. While we did not achieve our 2010 corporate targets for employee safety, we were honoured to learn in 2011 that we would receive the **bronze-level Canadian Electricity Association President's Award of Excellence for Employee Safety for 2010**.

Our passion also drives our commitment to achieving our goals for disciplined growth. In 2010, we committed approximately **\$1 billion to new growth opportunities**. We acquired the Island Generation facility in British Columbia, where employees celebrated their 10th year without a lost time injury, and we won contracts for two new wind projects.

WE ACT WITH INTEGRITY

In all aspects of our business, **we work to provide open, honest, transparent and complete information**. Through our operations, government relations, public consultation, investor relations, and all other forms of internal and external communications, we listen carefully, act respectfully, and deliver on our promises.

In 2010, **we rolled out our updated ethics policy**, which clearly describes the ethical responsibilities of the Board of Directors, management, employees, and contractors and consultants who perform work on behalf of Capital Power. The policy clearly indicates the steps our people can take to confidentially report situations in which they believe or suspect that an ethical violation of the policy has taken place.

WE WORK TOGETHER

We believe that working together and having **clear accountability builds a stronger company**. We've invested significant effort into the creation of well-defined roles throughout the company, and ensuring that individuals have both accountability for results and the resources to achieve their goals.

Externally, we work with our stakeholders to learn their priorities and beliefs, and we incorporate their feedback into our projects and facility management. In the consultation and engagement section of this report, we share our experience working together with First Nations and other Aboriginal stakeholders in British Columbia as we develop the Quality Wind Project.





We strive to ensure that our stakeholders are fully aware of what we are doing and planning, the reasons behind our actions and plans, and the outcomes and results of our work.

WE ARE ACCOUNTABLE

We strive to ensure that our stakeholders are fully **aware of what we are doing and planning**, the reasons behind our action and plans, and the outcomes and results of our work. For example, as part of our investor relations program, we outline our annual targets and report quarterly – where we achieved our targets and where we fell short. In this report, we do the same across a comprehensive array of performance indicators. Internally, managers are accountable for clearly communicating expectations to their team, including the expectation that every employee is accountable for the decisions he or she has been empowered to make.

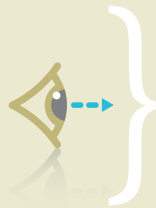
WE CREATE AND ENHANCE SHAREHOLDER VALUE

We are **committed to delivering total shareholder return** that is better than the median of our peer group, and to maintaining an investment-grade credit rating. To achieve these goals, we balance merchant and contracted generation in our portfolio, we focus on a limited number of generation technologies, and we seek to build hubs of assets in selected markets, which we manage as a portfolio. These hubs create efficiencies in terms of facility management and maintenance, resources, and being knowledgeable in regulatory requirements.

While these tactics illustrate how the company is working to create shareholder value, they alone are not sufficient to achieve our vision of becoming one of North America's most respected, reliable, and competitive power generators. We believe that the best way to earn the respect of stakeholders is to operate our business in a way that is worthy of respect – and then share our performance with you. Thanks to the dedication of our employees and their performance, **Capital Power was named one of the 'Best 50 Corporate Citizens in Canada' by Corporate Knights magazine in 2011.**



BRIAN VAASJO PRESIDENT AND CEO



We look forward to reporting on our corporate responsibility in the years to come, and we remain committed to transparency and upholding the highest ethical standards in all that we do.



Capital Power's business targets and performance

MEASURES

2010 RESULTS

2011 TARGETS ⁽¹⁾

GROWTH CAPITAL

Committed capital for acquisitions/developments that are in-line with targeted rates of return

\$1 BILLION
compared to a target of \$500 million

>\$1.5 BILLION
\$1.5 billion or higher

OPERATIONAL

Plant availability average
(excluding CPILP plants)

90%
compared to a target of 94%

>94%
or greater

Plant maintenance capital expenditures
and Genesee mine extension

\$56 MILLION
Sustaining capital expenditures of \$56 million,
compared to a target of \$60 million

\$56 MILLION
approximately

CONSTRUCTION/DEVELOPMENT

Capital Power's final costs in the
construction of Keephills 3 plant

\$892 MILLION
\$892 million with commercial
operation expected in Q2, 2011

\$955 MILLION
or less with commercial
operation expected in Q2, 2011

Quality Wind and Port Dover
& Nanticoke wind projects

ON TARGET
On time and on budget with commercial
operation expected in Q4, 2012

Continue on time and on budget with
commercial operation expected in Q4, 2012

INVESTMENT PERFORMANCE

Deliver total shareholder return
better than our peer group

16.6%
Total Shareholder Return, compared
to peer group average of 22.4%

Deliver total shareholder return that exceeds
the median of the company's peer group

(1) See Capital Power's latest quarterly financial results for status updates on these 2011 targets at www.capitalpower.com.





* { Who are we ?

PEOPLE

We are **people** deeply committed to achieving the company's vision.



our values

We are passionate about
our business and safety

We act with integrity

We work together

We are accountable

We create and enhance
shareholder value



The people of Capital Power

At Capital Power, we believe that acting responsibly and respectfully in every aspect of our operations is vital to the realization of our goals.

We own, operate, acquire and build power generation facilities that run on fuel sources such as coal, natural gas, and wind. In 2010, we had more than 40 separate locations in Canada and the United States, which included both corporate offices and facilities.

It takes a strong team of committed individuals to run and grow our company. Our people have diverse backgrounds, training and experience, and they work together as a team. We hire a range of occupations – including engineers, mechanics, control room operators, security, accountants, lawyers, project managers, public consultation advisors and administrative assistants, to name a few.

OUR PEOPLE DEFINE OUR SUCCESS

At the end of 2010, Capital Power was only 18 months old, with 2010 marking our first full year of operations.

Our people were the strength behind a very successful year. Working together in cities and towns across North America, our 1,047 employees continued building our new company, laying the strong foundation needed to achieve our plans for growth.

 } **1,047** EMPLOYEES

It takes a strong team of committed individuals to run and grow our company.



WHO WE ARE



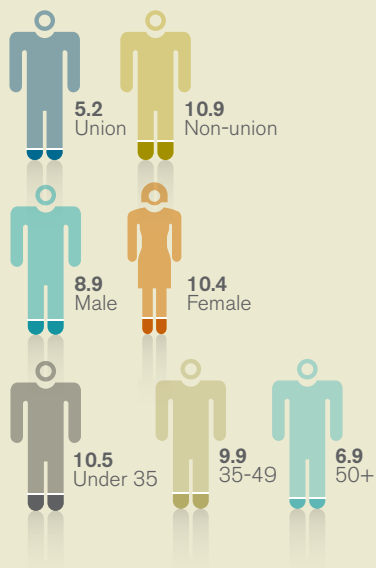
WORKFORCE





TURNOVER (%)

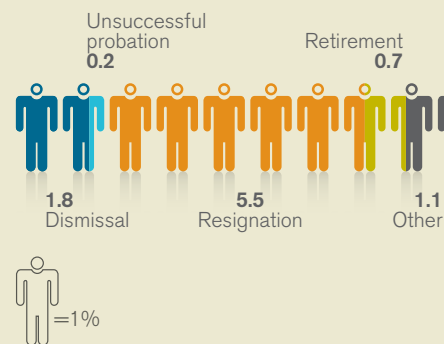
EMPLOYEE



* The employee turnover shows the turnover within different segments of employees.

TURNOVER REASON

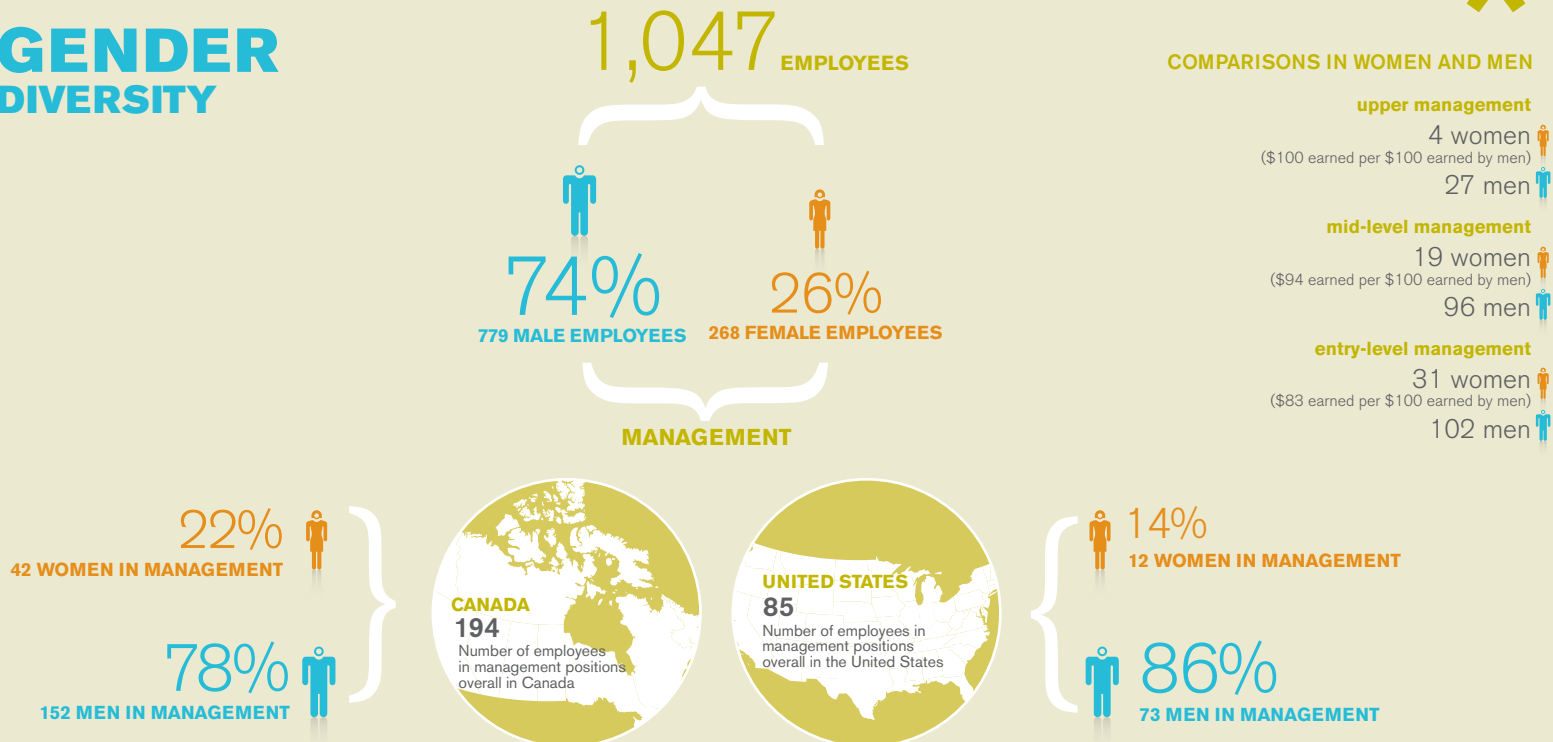
EMPLOYEE



* Employee turnover reason shows the contribution of each cause of turnover to the overall turnover rate on an additive basis.



GENDER DIVERSITY



Collective agreements

We have positive relationships with our six Canadian labour unions, which together represent approximately 40% of our Canadian labour force and approximately 30% of our overall workforce.

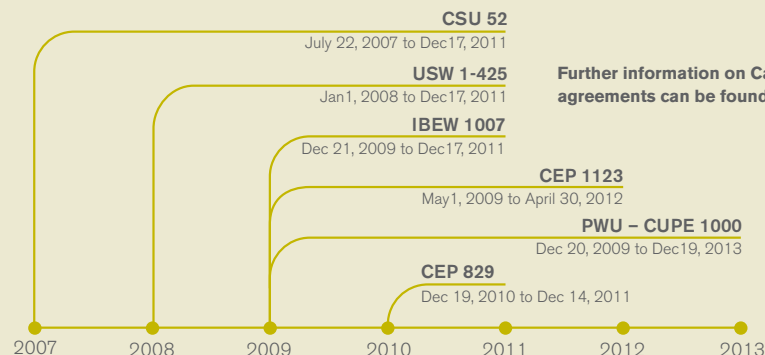
There have been no labour disruptions or work stoppages at Capital Power or its predecessor companies since 1978. In 2010, 20 grievances were filed.

The three bargaining units in Alberta are: Civic Service Union (CSU) 52; International Brotherhood of Electrical Workers (IBEW) Local 1007; and Communication, Energy and Paperworkers (CEP) Union of Canada Local 829.

Outside of Alberta, we have agreements with three unions: the United Steel Workers (USW) 1-425 in Williams Lake, British Columbia; the Communication, Energy and Paperworkers (CEP) Union of Canada Local 1123 in Campbell River, British Columbia; and the Power Workers Union (PWU) Canadian Union Provincial Employees (CUPE) Local 1000 in Ontario.

The minimum notice period for operational changes varies among the collective agreements. On average, employees receive a minimum of 24 hours notice for a change in shift.

At the date of publication, Capital Power's collective agreements were:



In 2011, Capital Power successfully negotiated memorandum of agreements with our CEP 829 and CSU 52 union stakeholders. The CEP 829 memorandum was ratified on August 2, 2011. The new Capital Power CEP 829 collective agreement expires in December 2013. A memorandum of agreement was reached with CSU 52 for a one year deal.

Further information on Capital Power's collective agreements can be found in our AIF at sedar.com.

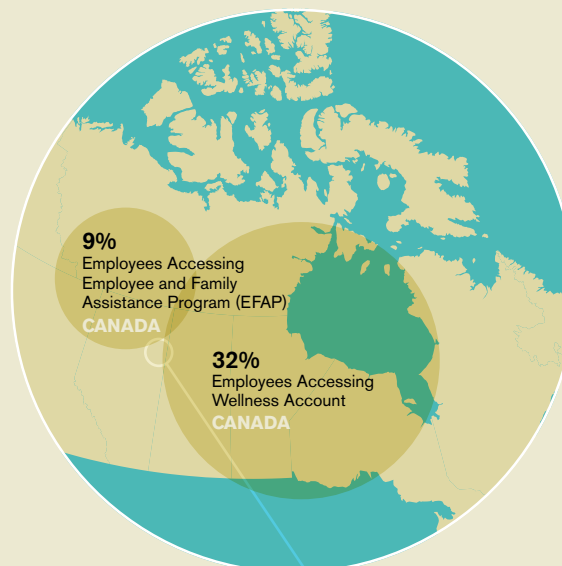
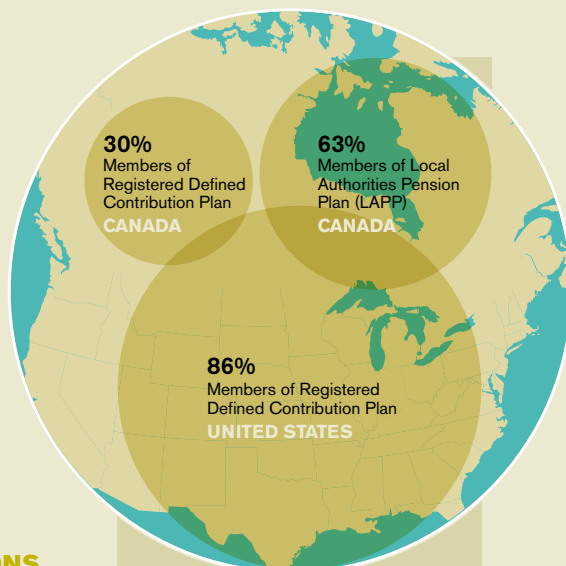



 \$177 MILLION
 EMPLOYEE WAGES AND BENEFITS


 502
 Employees that are members of
 Local Authorities Pension Plan
 (LAPP), a multi-employer
 defined benefit plan

WAGES AND COMPENSATION

COMPARISONS



100%

% workforce paid more than the minimum wage
(national) Canada and the United States

\$10.71

Difference between Capital
Power's lowest starting wage and
local minimum wage (Alberta)



10,000

MEGAWATTS BY 2020 IS OUR GROWTH PLAN



Capital Power School of Business mission

Create, sustain, and grow a strong learning and development culture that services a one company ideal and supports Capital Power's strategy, business goals, and values.

Training and education

At a new employee training session, one of our new employees explained why he came to work for Capital Power. "It is a rare opportunity, especially in Canada, to be part of growing and building a company from the very beginning. There is so much more complexity to the company than I had ever known or imagined. Some of the most successful people in the world started with learning and building from the bottom up. I wanted to be part of building that legacy."

CONTINUOUS DEVELOPMENT

We invest in ongoing training and education for employees. Knowledgeable, competent employees, in all aspects of our business, are key to reaching our growth plan of **10,000 megawatts by 2020**.

Our learning and development program is based on the principles that:

- Continuous employee learning and development is central to the achievement of the company's strategy and long-term plan;
- Offerings must provide the right learning and development at the right time to the right employees at the right cost; and
- Learning and development investments must be linked to supporting the corporate strategy and long-term plan, compliance and regulatory obligations, career and succession planning, workforce planning, and/or the annual performance review process.

CAPITAL POWER SCHOOL OF BUSINESS

The Capital Power School of Business promotes a strong learning and development culture. It covers core skills and leadership development and external professional development, which includes funding for work-related conferences, courses required to achieve or maintain professional designations, and occupation-specific training.

Strong Start orientation and on-boarding program for new employees

Our interactive, online **Strong Start** orientation and on-boarding program welcomes new employees and gives them a foot forward in their **first 100 days of employment**. This innovative program positions employees for success.

In 2010, 89 employees completed the web-based Strong Start course and 20 employees completed the Strong Start classroom course.

SELF-DEVELOPMENT

The **After Hours Personal Development Program** helps employees to fund their certificates, diplomas and degrees, or individual courses. **We provide up to \$1,500 per year for full-time employees and \$750 per year for part-time permanent employees.**


Developing executive and high-potential talent

Capital Power's executive development program is designed to build a talent pipeline for senior leadership roles. Candidates are nominated through the company's succession planning process, and individual development plans are customized to each individual.

Technical, apprenticeships, and health and safety training

Technical training, apprenticeships, and health and safety training are managed and budgeted within each department or business unit based on occupational requirements.





CREATING BALANCE We are committed to helping our people achieve and maintain total well-being, not just at work, but in their personal lives as well.

Employees, managers and executives are not just encouraged but are required to take annual holidays. Out-of-scope (non-union) employees are also provided with one Friday per month as a 'scheduled day off,' in addition to other benefits, described more fully on page 17.

Engaging our people

It's more than just talking the talk – it's walking the walk. When employees have a clear understanding of their roles, responsibilities and accountabilities, it creates a **healthy work culture**, and employees can more easily provide meaningful day-to-day contributions.

We are working hard to create an environment where every employee knows what they are accountable for, understands how their contributions fit with the corporate strategy and long-term plan, feels valued for their contributions, and are trained, coached and empowered to perform to their highest potential.

Accountabilities and responsibilities are tailored to each individual at all levels of the company. Employees' performance reviews, career development plans and incentive programs align with their personal accountabilities and the corporate strategy.

WORKING SMARTER

Employees are encouraged to look at new strategies, new structures and new ways of doing things. In 2010, Capital Power realized more than **\$7.3 million in permanent cost reductions from employee-led initiatives**, such as renegotiating contracts and making process improvements.

Some examples include:

- Negotiating network software licences to replace single instance licences;
- Replacing disposable bottles at the Genesee Generating Station with permanent water bottles;
- Optimizing local training opportunities; and
- Moving our detailed quarterly financial disclosure to online sources rather than news releases.



Employees are encouraged to look at new strategies, new structures and new ways of doing things.



"I was already volunteering in my community when I was asked to be a mathematics coach on the Academic Decathlon team at Santa Clara Elementary School. After investing significant coaching time, the team achieved district champions. My EmPowering Communities grant helps the team with registration and other operating costs. I love teaching and being a mentor. This grant helps not only encourage me to keep volunteering, but hopefully encourages these kids to do the same for others someday." ROMAN LADAW Mechanical Coordinator, Oxnard, CA

8,500
EMPLOYEE VOLUNTEER HOURS



\$25,295
CAPITAL POWER CONTRIBUTIONS
THROUGH THE VOLUNTEER PROGRAM



Supporting employee volunteerism and generosity

EMPOWERING COMMUNITIES

Our employees generously donate their time, talent and skills to causes that are important to them. In 2010, 82 employees reported more than 8,500 hours in community volunteer efforts.

Employees who reported volunteering a minimum of 35 hours in 2010 could apply for a \$300 grant – an increase from \$200 in 2009 – to be directed to a non-profit or community service organization they recommended. **Capital Power contributed \$25,295 through the volunteer program to 78 organizations in 2010.**

CHRISTMAS BUREAU OF EDMONTON

Each year, individuals and corporations in the greater Edmonton region come together to ensure that the least fortunate in the community receive a festive food hamper for the holidays.

We provided \$10,450: composed of \$7,000 from Capital Power's Board of Directors in lieu of Christmas gifts, and \$3,450 donated by employees at the Genesee facility.

Employees receiving grants in 2010 were able to make an impact on 78 worthwhile causes, including:

Alberta Children's Hospital Foundation • YWCA Edmonton • Iroquois Falls Minor Hockey Association, Ontario • Canadian Breast Cancer Foundation • Richmond Dance Society, British Columbia • Strawberry District Society, Alberta • Boy Scouts of America • Chicago Cares, Inc. • Village of Corinth Firemen's Association, New York • Special Olympics Alberta Association

CAPITAL POWER EMPLOYEES CONTRIBUTE TO HELP HAITI

Our employees throughout North America contributed \$17,630 to a number of different charitable organizations in response to the January 12 earthquake that devastated Haiti. The company matched all employee contributions and directed the corporate match to the Canadian Red Cross Haiti Earthquake Relief Fund. In total, **we provided \$35,260 to help Haiti recover and rebuild.**

UNITED WAY

We successfully executed our first independent United Way Campaign in 2010, and, for the first time, the campaign was North American wide. The annual campaign is one component of our Community Investment Strategy.

Employees in seven regions throughout North America **raised nearly \$300,000.** This included the company's matching donation of 100% of all new employee pledges and 50% of donations from the previous year.

"Capital Power employees in the United States embraced their first United Way Workplace Campaign, raising \$45,162 and exceeding their North American United Way Campaign goals by 34%," said Barbara Kaplinsky, Senior Fundraising Manager, United Way of Metro Chicago. "Capital Power exhibited extraordinary corporate citizenship. Their corporate and employee commitment and involvement are making cities across the North American continent better places for all of us to live, work and do business."

We also made Regional Bonus Donations in the two regions that met their stretch fundraising target. Employees in the United States West Region directed more than \$1,700 to the American Red Cross. Genesee employees directed \$2,800 to the Leduc & District Food Bank.

Capital Power was recognized by the United Way of Alberta Capital Region for the success of our campaign in the Edmonton region. **We were nominated for three United Way Awards of Distinction. We also received the Quantum Leap Award,** which recognizes an organization that follows the United Way best practices, attends orientation sessions, demonstrates spirit and commitment to their campaign, and shows significant increases in dollars and participation.





It takes a team to run
a reliable, respectable,
competitive company.

Upholding ethical behaviour

Guided by our corporate values, **we stand behind our word, we report openly on our performance, and we treat our employees and neighbours with respect.** Our updated Ethics Policy was rolled out to employees in January 2010, with 100% of employees certifying that they had read and understood the policy. All new employees are also required to sign the policy, and managers are accountable for ensuring their employees are aware of and understand the policy.

A copy of the full policy is available
at www.capitalpower.com.

[www.](http://www.capitalpower.com)

Employees and others have several ways of reporting situations where they believe or suspect violations of our ethics policies, laws or regulations. Employees are actively encouraged to raise potential violations with their manager or any member of senior management. Employees may also anonymously report a concern by contacting the company's **Integrity Hotline, which operates 24-7** and is staffed by an independent third party under strict confidentiality obligations.



We investigate all ethical complaints thoroughly and promptly. We will not allow or pursue retaliation of any kind against any employee who reports a violation or ethical concern. In 2010, we received six inquiries or concerns raised by employees involving our Respectful Workplace, and Anti-Harassment and Anti-Discrimination Policy. All of these inquiries were investigated promptly and have been resolved, with appropriate action being taken.



100%

EMPLOYEES CERTIFYING THAT THEY READ AND UNDERSTOOD THE ETHICS POLICY

BENEFIT PROGRAMS

Employee benefits include, but are not limited to, health and wellness, family-friendly benefits, retirement and savings programs, and education support. Benefits were improved for Canadian employees in 2010 to include increases to the flex credits available for the purchase of health/dental coverage and Health Spending Accounts, direct company funding of Health Spending Accounts, and the introduction of new optional benefits.



THE FLEX TOTAL REWARDS PROGRAM

The Capital Power Total Rewards program is based on a Flex Credit system that **allows employees to direct their own coverage by allocating credits to different areas** so they can choose the level and kind of benefits that best serve the needs of themselves and their families. The Total Rewards program also includes short- and long-term disability coverage and a company savings plan.



PERSONAL WELLNESS

The Capital Power Wellness Account program encourages and empowers employees to take charge of their health. In 2010, **permanent employees could apply for a 50% reimbursement for activities and products** that promote healthy living, up to an annual maximum of \$200.

Planned changes for 2011 include replacing the Wellness Account with the **Personal Spending Account**, offering \$200 for full-time employees and \$100 for part-time employees, as well as the opportunity to top up the account by trading in personal days for equivalent dollar credits. As of July 1, 2011, employees were able to use their accounts to recover 100% of eligible expenses such as home fitness equipment, smoking cessation products, formal weight-loss programs, fitness memberships, organized league sports, golf and skiing lessons, personal trainers, and yoga, to name a few.



INCENTIVE PROGRAM

Non-union employees participate in a short-term incentive plan (STIP), which is based on the achievement of corporate, group, and individual performance objectives. Incentive targets vary by position, generally increasing as the employee moves up in the organization. The **incentive target is a percentage of base salary, generally ranging from 2.5% to 20% or more**. Union employees participating in the STIP have a target incentive identified in their collective agreement.

At the end of the year, actual performance is measured against these predetermined performance measures, and the plan pays out on the basis of achievement, within an expected range of performance – a minimum performance expectation (threshold), an expected result (target) and a plan maximum (stretch target).

Actual performance relative to the threshold, target and stretch values for each performance measure are weighted based on the performance incentive model.

For more information on our compensation philosophy and programs, see the 2011 Capital Power Corporation Management Proxy Circular (pages 31 to 48), available at www.capitalpower.com.

[www.](http://www.capitalpower.com)

EMPLOYEE AND FAMILY ASSISTANCE

Employees may seek assistance through several formal options, including their immediate supervisor, the Human Resources department or a confidential support service. Our Employee and Family Assistance Program (EFAP) helps individuals, couples and families access short-term counselling to assist with life challenges. This includes help with anxiety, depression, career enhancement and workplace issues, family issues, bereavement, addictions and other health issues. Counselling services are offered by phone, online, in-person and text-based (e.g. self-care, self-learning).



FREE FLU SHOTS AND CLINICS

Capital Power provided employees and their dependants with free immunization for seasonal flu in 2010.



We offer performance-based pay increases that recognize individual performance.

Capital Power can only be
a great place to work if it
is a safe place to work.



Safety philosophy

Capital Power can only be a great place to work if it is a safe place to work. Our Environment, Health and Safety Policy is designed to **create a framework to minimize occupational injury and illness by ensuring:**

- Compliance with all applicable laws and regulatory requirements;
- Proactive identification and management of environment, health and safety-related risks within operations, maintenance and construction activities;
- Continuous review and improvement of the policy;
- Establishing appropriate goals and monitoring of performance;
- The alignment of contractors with company policy; and
- Promotion of a zero-injury culture and healthy lifestyles.

We ensure that safety targets are established and monitored, equipment is in safe working order, and employees receive the necessary safety training and have the appropriate tools and protective equipment to **complete their work in a safe manner.**

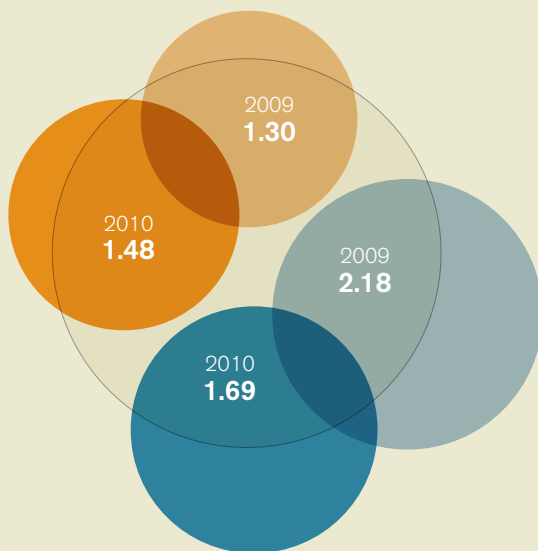


{15

EMPLOYEES WERE INJURED IN 2010



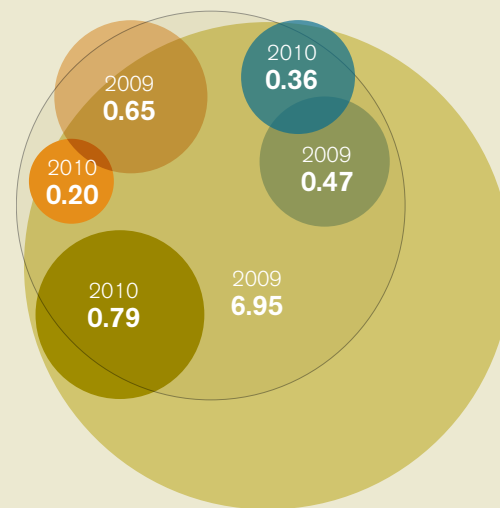
TOTAL RECORDABLE INJURY/ILLNESS
FREQUENCY (TRIF)*



TRIF = (total recordable injuries/total exposure hours) x 200,000, where recordable injuries include medical treatment, lost time injury, fatality, and other recordable incidents (restricted work and loss of consciousness).

- Capital Power
- Canadian Electricity Association Average

LOST TIME INJURY FREQUENCY (LTIF)
AND SEVERITY (LTIS)*



The injury rate is commonly referred to as the 'frequency rate' (LTIF) and the lost workday rate as the 'severity rate' (LTIS). The severity rate is the better indicator of safety performance because it measures the more serious injuries involving lost work days. The frequency rate is a good general indicator, but is limited because it gives equal weighting to both major and minor injuries.

- Capital Power LTIF
- Canadian Electricity Association Average (LTIF)
- Capital Power LTIS

2010 safety performance

In 2010, many positive safety activities were undertaken. We began rolling out safety management systems and updating safety procedures and office safety programs at all our office locations.



In October 2011, the **Canadian Electricity Association President's Award of Excellence for Employee Safety for 2010 (bronze level)** will be awarded to Capital Power. This award is granted to companies that have attained top quartile safety performance relative to their peers. Despite this achievement, however, **we missed our corporate safety target for 2010.**

Fifteen employees were injured seriously enough that they required medical attention in 2010; however, only two incidents resulted in lost time injuries. Most of these incidents were related to general and routine work that is not directly attributable to operation and maintenance activity. And while one injury is too many, the higher risk activities directly related to operation and maintenance activity were done safely.

To compare our safety performance year over year, a calculation that normalizes the injury/illness rate

is used as an industry standard. Total Recordable Injury Frequency (TRIF) normalizes rates based on the number of hours worked and allows an "apples-to-apples" comparison to other companies and industry sources such as the Canadian Electricity Association. **The formula uses 200,000 work hours as a normalizing factor, representing a hypothetical workforce of 100 full-time employees who work 40 hours per week for 50 weeks** (assuming two weeks for vacation and holidays).

*2009 company data is for the period July 1 – December 31, 2009.
Canadian Electricity Association averages are for Group II utilities.



120

CAPITAL POWER EMPLOYEES SERVED ON
18 FORMAL HEALTH AND SAFETY COMMITTEES

Keeping employees safe – a life safety skill

The safety and health of our employees and neighbours is paramount. We believe that safety is more than a process to be followed – it is a day-to-day mentality that must be entrenched in our culture. We are working toward a culture where there are zero incidents, and where safety is a way of life for all employees – not just at work but in everyday living.

HEALTH AND SAFETY COMMITTEES

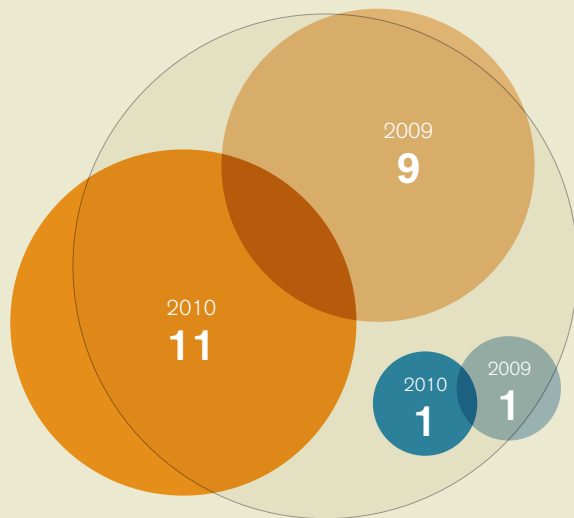


Ongoing safety training is mandatory for employees in field or operating positions, and crews hold **daily safety planning meetings**. Various joint manager-worker safety committees function in these operational areas, and all contractors and subcontractors working on our sites must meet strict safety standards.

3.4

MILLION HOURS

In 2010, the number of contractor hours on major projects, such as construction of Keephills 3, totalled approximately 3.4 million hours, equivalent to 2,000 full-time equivalent positions.



- Number of Medical Treatments
- Number of Lost Time Injuries

2009 contractor data is for the period July 1 – December 31, 2009.

500,000 { 

PERSON HOURS WITHOUT A LOST TIME INCIDENT AT NIPIGON POWER PLANT

CONSTRUCTION SAFETY PERFORMANCE

Two significant construction projects were underway in 2010 – Keephills 3 and the Quality Wind Project.

In 2010, contractors at Capital Power construction sites reported **11 medical treatments and one lost time injury**.

We require contractors to manage their environment, health and safety risks in a manner consistent with our policy, and we monitor safety

performance as part of contractor selection and approval to perform or continue work.

SAFETY IN ACTION

2010 was a solid year for health and safety at several regional power generation facilities.

Nipigon Power Plant achieved 500,000 person hours without a lost time injury, an achievement that began 18 years ago when the plant was commissioned in 1992.

The North Bay and Kapuskasing Power Plants have achieved **15 years without lost time injuries**.

The process of safe work planning allows for hazard identification, actions and controls for the noted hazard and a process for hazard mitigation. This process has been adopted by our employees and contractors to ensure job tasks are completed by safely planning the work process.

Where are we ? } *



We are committed to
protecting the **places**
where we live and work.

***PLACES**



32

FACILITIES ACROSS
NORTH AMERICA

3

FACILITIES WITH A COMBINED
TOTAL OF 495 MEGAWATTS UNDER
CONSTRUCTION OR IN DEVELOPMENT



Places

At the end of 2010, Capital Power had interests in 32 facilities in Canada and the United States, totalling approximately 3,800 megawatts of capacity, plus 495 megawatts under construction or in development.

We added one new facility, **Island Generation** in British Columbia, and won two long-term contracts, the **Quality Wind Project** in British Columbia and the **Port Dover & Nanticoke Wind Project** in Ontario, totalling 522 megawatts of additional power generation capacity.

Our people take pride in the company's operations – the way they are run, the way they are maintained, and the way they impact the community and surrounding landscape.

Our operations have a significant lifespan, and **we are conscious of our footprint**. We respect our community neighbours and work together with communities – honestly, openly and with transparency.

OUR FACILITIES

A key strength, and one that differentiates our corporation from its peers, is the relatively young age of our power generation assets, which are among the newest in North America.

Our continued focus on operational excellence and environmental and safety leadership is a priority in day-to-day work and for achieving long-term strategic growth. **We are a safe and skilled operator with a high-output fleet averaging 90% availability in 2010.**

Subsequent event

In the first quarter of 2011, we acquired **three natural gas facilities in the New England region (Connecticut, Maine, and Rhode Island)**. In the **second quarter, we acquired a 150-megawatt wind project in development in Alberta**, entered into an agreement to divest interests in Capital Power Income L.P., and entered into an agreement to acquire the two North Carolina plants currently held by Capital Power Income L.P.



150



MEGAWATT WIND PROJECT IN ALBERTA

BRITISH COLUMBIA

Brown Lake
Moresby Lake
Quality Wind (in construction)
Williams Lake
Miller Creek
Mamquam
Island Generation

WASHINGTON

Frederickson

CALIFORNIA

Oxnard
North Island
Naval Station
Naval Training Center

6

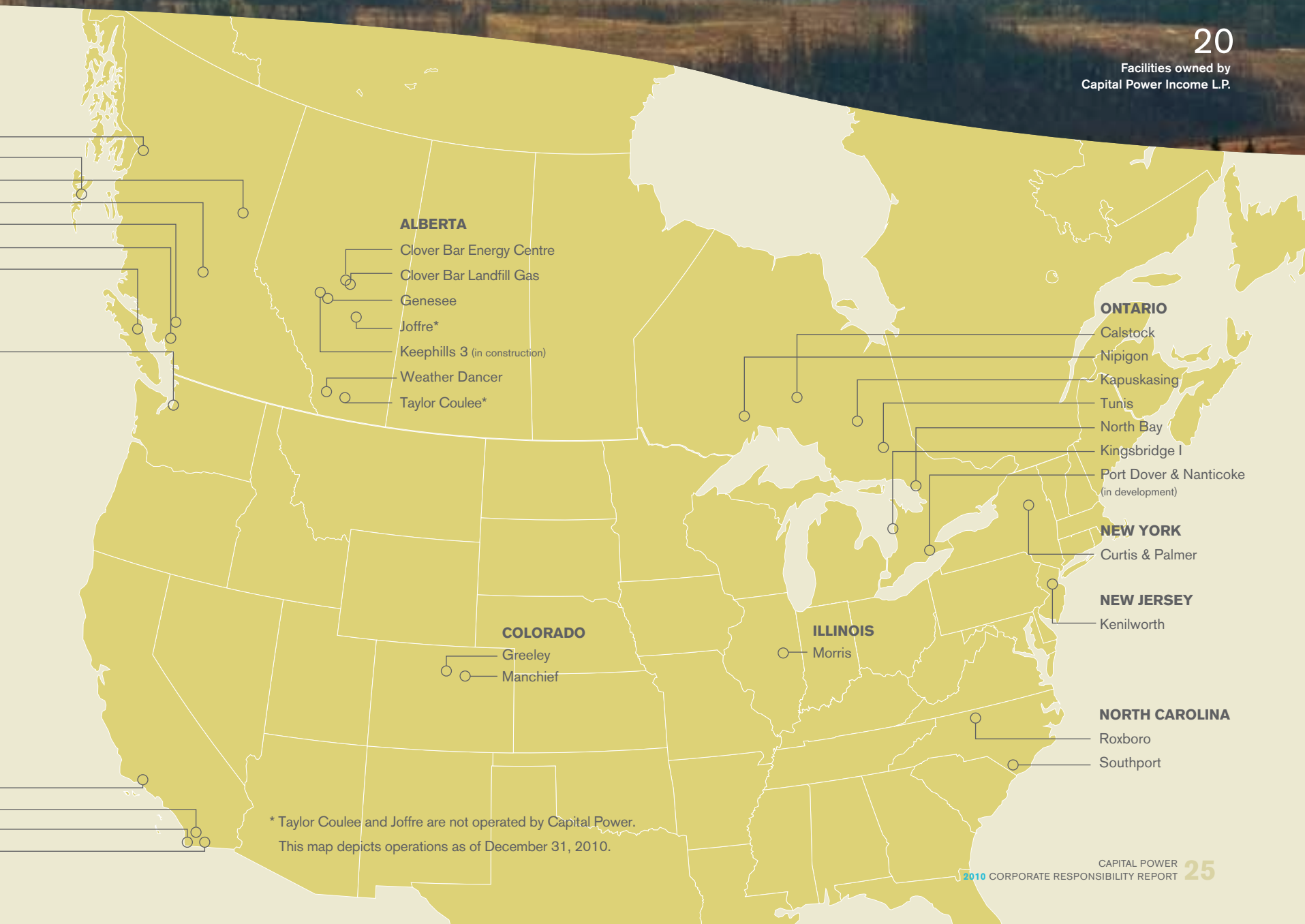
Merchant facilities and one Power Purchase Arrangement (PPA) in Alberta, whose production is sold into deregulated wholesale power markets

6

Contracted facilities in Alberta, British Columbia and Ontario, whose production is sold to counterparties through PPAs or long-term contracts

20

Facilities owned by Capital Power Income L.P.



FUEL SOURCES

In 2010, compared to 2009:



Coal consumption declined by 3.2% due to the two planned maintenance outages at Genesee 2 and 3.



Natural gas consumption increased by 2.2% because of the acquisition of Island Generation in October 2010, a natural gas facility in British Columbia, and because commissioning of all units at our Clover Bar Energy Centre was complete by the end of 2009.



Biomass consumption increased by 68.9%. Our Williams Lake Biomass Power Plant in British Columbia returned to normal operating activity after a shutdown in 2009, and our Roxboro and Southport facilities in North Carolina increased their biomass consumption after completing significant operational and environmental enhancements. (See 'Operational enhancements' on page 28 for details.)



Tire-derived fuel consumption increased by 21.2%. Capital Power invested in significant upgrades to the North Carolina facilities to be more environmentally efficient. Both the efficiencies and the higher availability contributed to this consumption increase. (See 'Operational enhancements' on page 28 for details.)



Generation from waste heat declined by 17% due to lower flows on the TransCanada Mainline. Capital Power operates facilities in northern Ontario which capture waste heat from TransCanada's pipeline operations.

We work hard to run a well-maintained fleet of power plants.



3.2%

COAL CONSUMPTION DECLINED



How our facilities 'stacked up' in 2010

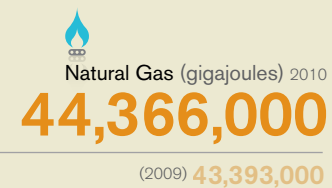
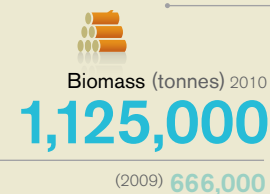
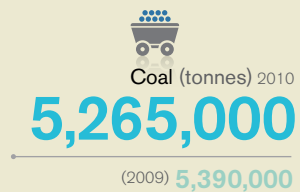
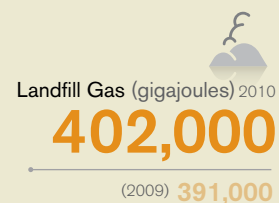
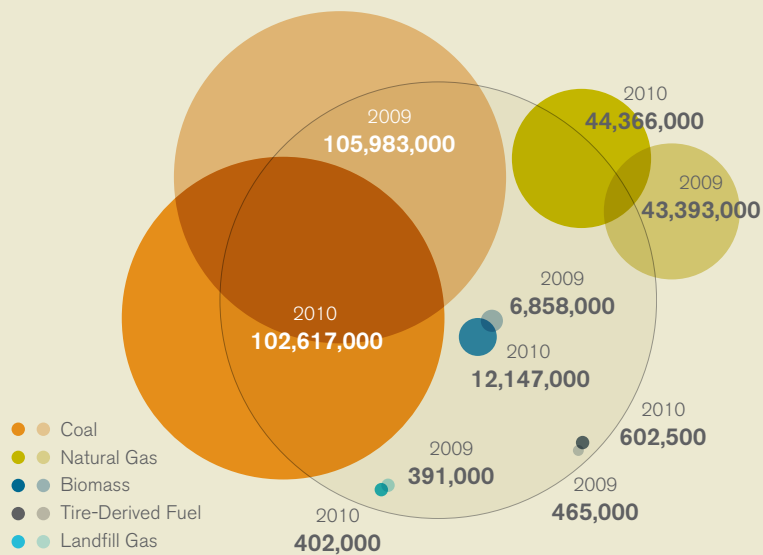
Similar to cars, power plants require routine maintenance, or – as we call them – scheduled outages or shutdowns. **These outages, depending on the requirements, can vary in length and cost.** Some of our facilities (peaking plants that operate under specific market conditions) are somewhat akin to owning a convertible in Alberta – you only run them if the conditions are right. The number of outages at our plants, the availability of the plants, and the amount of fuel required to run them – all piece together to tell an overall story of our facilities throughout the year.

POWER PRODUCTION

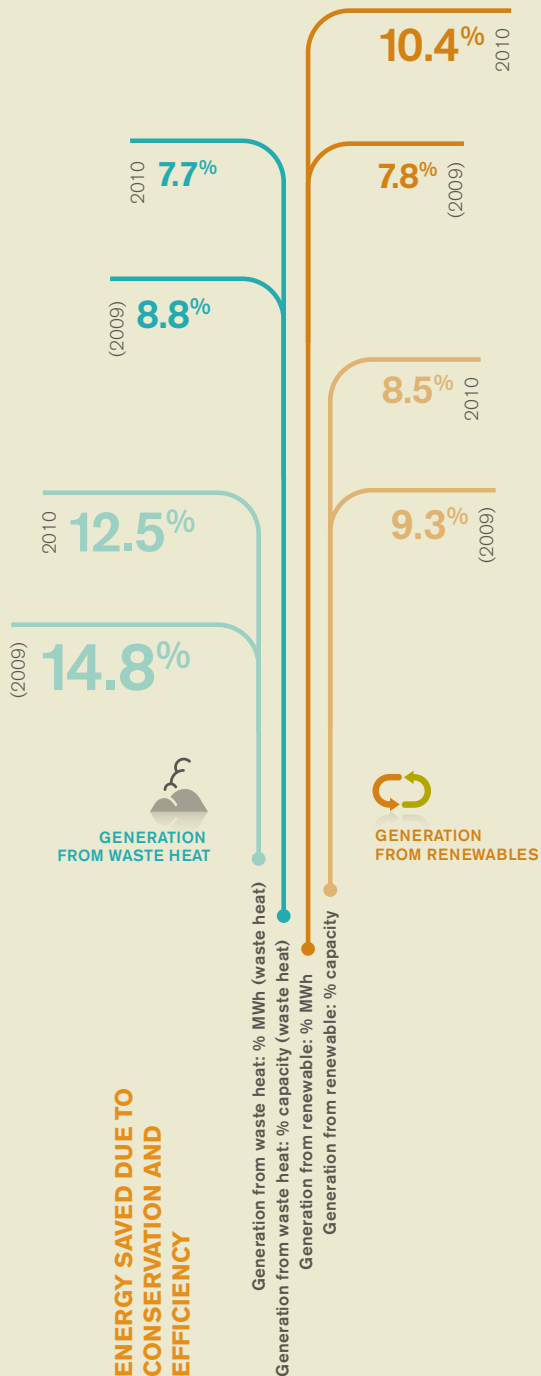
Power production in 2010 was 1.3% lower than in 2009. This was a result of two planned shutdowns lasting 65 days in 2010 at the Genesee Generating Station in Alberta. In 2009, there was only one planned shutdown at Genesee, lasting 19 days.



**DIRECT ENERGY
CONSUMPTION (GIGAJOULES)**



MATERIALS USED



US **\$82** MILLION

INVESTED TO ENHANCE THE SOUTHPORT AND ROXBORO PLANTS IN NORTH CAROLINA

Operational enhancements

We completed capital projects at CPILP's California and North Carolina facilities that are resulting in improved operating efficiencies and reduced environmental emissions.



NEW EFFICIENT TURBINE INSTALLED AT CALIFORNIA FACILITY

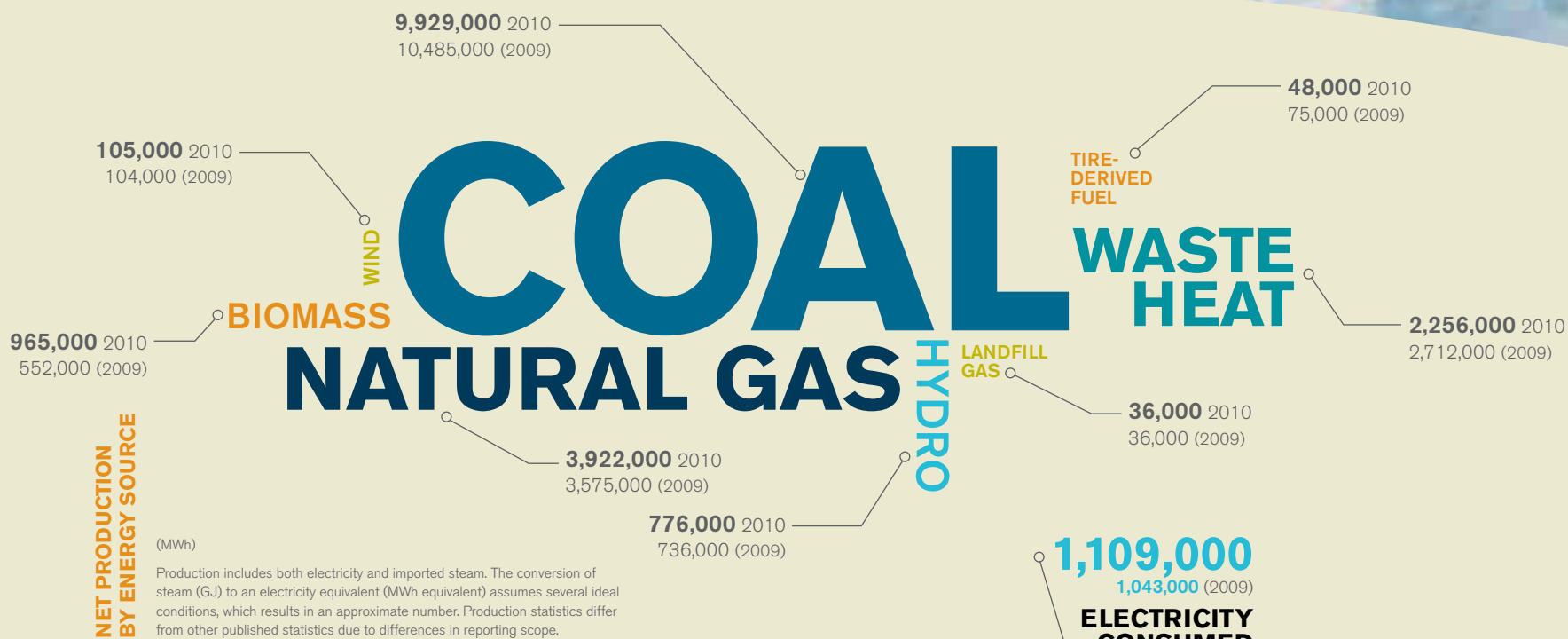
Replacing a gas turbine with a more efficient gas turbine at our Oxnard facility led to less water consumption, lower nitrogen oxide emissions, and improved reliability and efficiency.

FACILITY ENHANCEMENTS AT THE NORTH CAROLINA FACILITIES

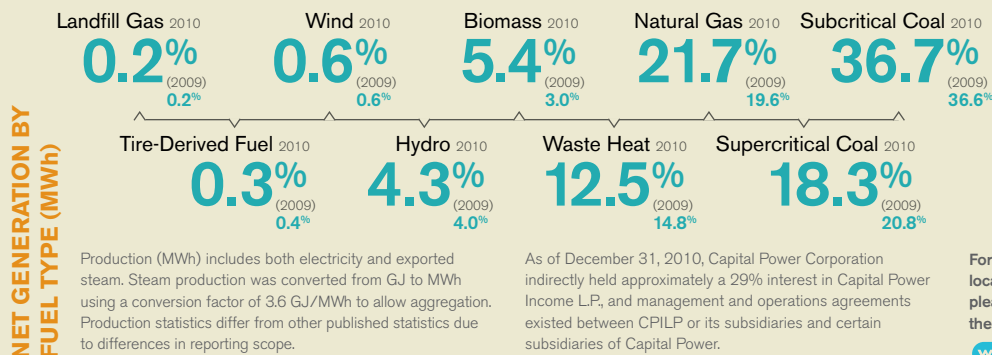
Approximately US\$82 million was invested over the past several years to enhance the Southport and Roxboro plants in North Carolina. Environmental emissions were reduced and

economic performance was improved by **increasing the use of tire-derived fuel and wood waste in the fuel mix**. The final phase of the project was completed in late 2010. Additional work in 2011 includes completing access roads and final testing.

The plants moved away from a fuel mix of 85% coal, 10% tire-derived fuel (TDF) and 5% wood to a nominal fuel mix of one-third coal, one-third TDF and one-third wood. By increasing the wood-fuel percentage, carbon emissions were reduced and the company's ability to create Renewable Energy Credits was maximized.



1,109,000
1,043,000 (2009)
ELECTRICITY CONSUMED BY STATION SERVICES



As of December 31, 2010, Capital Power Corporation indirectly held approximately a 29% interest in Capital Power Income L.P., and management and operations agreements existed between CPILP or its subsidiaries and certain subsidiaries of Capital Power.

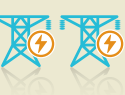
For information on the production capacity, energy source, location, and ownership interests for Capital Power's 32 facilities, please see the tables provided in Capital Power's 2010 AIF and the 2010 Annual Report for Capital Power Income L.P.

www.capitalpower.com

NET PRODUCTION
GROSS PRODUCTION

18,037,000 2010
18,270,000 (2009)

19,145,000 2010
19,312,000 (2009)



**CAPITAL POWER NET
GENERATION (MWh)**

2010

18,037,000

(2009)

18,269,000

**CANADIAN NET
GENERATION (MWh)**

2010

12,711,000

(2009)

12,395,000



CANADA



UNITED STATES

Capital Power 2010

10,562,000

(2009)

10,468,000

Capital Power Income L.P. 2010

2,149,000

(2009)

1,926,000

Capital Power Income L.P. 2010

5,326,000

(2009)

5,874,000

NET GENERATION (MWh)

The 2009 production statistics are for the relevant predecessor entity: EPCOR Utilities Inc.'s power generation business is the predecessor for Capital Power Corporation, and EPCOR Power L.P. the predecessor for Capital Power Income L.P. Production statistics may differ from other published statistics due to differences in the scope of reporting (see page 61).



All security personnel receive training in policies and procedures related to human rights.



Operating responsibly

DISASTER PLANNING

Company-wide and site-specific contingency planning are designed to ensure that we are **prepared for emergencies and business resumption after an emergency.**

Our disaster recovery planning focuses on the safety and security of employees, the public, protection of assets, effective emergency response, regulatory compliance, a smooth transition to backup operations and timely restoration of normal operations.



CORRUPTION RISK

We conduct an annual fraud risk assessment that includes various potential fraud scenarios. The exercise involves input from across the company and considers all areas of the business. If gaps are identified in control structures during the exercise, action plans are developed to remediate the issue.

HUMAN RIGHTS

None of our operations are at risk for incidents of child labour or forced labour, and there are no operations where the right to free association and collective bargaining may be at significant risk.

We recorded zero violations of the rights of indigenous people in 2010, and all security personnel receive training in policies and procedures related to human rights. Our contractors are required to align with the company's policies although they do not undergo a specific screening on human rights. We do not have significant investment agreements that include human rights clauses.



Our disaster recovery planning focuses on the safety and security of employees and the public.



We take all incidents of non-compliance seriously.



IN 2010, THE COMPANY REPORTS

zero incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services

zero customer satisfaction practices or survey results (Capital Power does not operate a retail-facing business)

7 penalties for violations of market trading rules in Alberta (see below)

zero incidents of non-compliance with labelling requirements (the company has no products or services subject to labelling requirements)

zero legal actions against the company for anti-competitive or monopolistic behaviour

zero complaints filed with a Human Rights Commission

zero injuries or fatalities by members of the public due to incidents involving our facilities

zero incidents of non-compliance related to marketing and advertising codes

zero substantiated complaints regarding breaches of customer privacy or losses of customer data

PRECAUTIONARY PRINCIPLE

When any Canadian statutory decision-maker or any court or tribunal applies the precautionary principle in making its determination, Capital Power considers this principle in the conduct of its activities in like circumstances. The 'precautionary principle' says that **when an activity raises threats to human health or the environment, precautionary measures should be taken** even if some cause and effect relationships are not fully established scientifically.

PRODUCT RESPONSIBILITY

Our employees are **required to be aware of and comply with all legal and regulatory requirements applicable to their jobs.**

Our energy trading operations in Alberta are monitored by the Market Surveillance Administrator (MSA). We report on potential contraventions of market rules based on the date the MSA makes a determination and issues a fine.

The MSA issued specified penalties for seven incidents from the fourth quarter of 2009 to the second quarter of 2011, for total fines of \$14,250. All fines, which were primarily a result of human error, were issued for violations of Rule 6.3.3, which describes the market trading rules for importing and exporting. Our Regulatory Compliance team is active in **working with internal groups to identify opportunities for process improvements**, whether a fine is issued or not.

We take all incidents of non-compliance very seriously. Employees continue to be diligent in adhering to the spirit as well as the letter of the law. In line with this view, the Alberta Electric System Operator has recently proposed changes to Rule 6.3.3 that, if they had been in place before Q4 2009, would have prevented four of the seven violations and reduced Capital Power's fines to \$2,750.

MANAGING THE IMPACTS OF DISPLACEMENT

Our operations may require the acquisition of land from local landowners. Our policy has always been to offer fair market value for land, and to offer other forms of compensation such as relocation costs and replacement costs for buildings. **We are committed to ongoing consultation and dialogue with community members** throughout the life of existing facilities and any proposed future projects.

One of our current projects is the proposed extension of the Genesee Generating Station's coal mine licence area in Alberta. Although no additional people were displaced due to our operations in 2010, the mine extension project would, as currently proposed, affect 37 landowners in the project area. (See 'Genesee Mine Extension Project' on page 42 for details.)



LOCAL COMMUNITIES

Community-minded

BEING OF THE COMMUNITY – NOT JUST IN IT

We are a local employer, contractor and community neighbour in communities across North America.

We strive to minimize the impacts of our operations – by listening, by committing to improvement, by following through on our promises and by enhancing the positive impacts we create through local suppliers and partnerships.

TAILORING INVESTMENTS TO THE COMMUNITY

We contribute to healthy, sustainable communities through an integrated and focused community investment program.

In 2010, we contributed **nearly \$1 million to a variety of programs and charitable organizations in communities** throughout North America where we have operations.

Our community investment program is divided into three key program areas:

- 1 Local facility neighbour program:** We invest to strategically support communities around our operations and major offices;
- 2 Community leadership program:** Members of our leadership team provide their experience and expertise to non-profit community organizations as board members and volunteers; and
- 3 Head office program:** As one of the largest companies headquartered in Edmonton, Capital Power is committed to helping build Edmonton's capacity as a great city in which to live and work by supporting Edmonton-based organizations.

We support registered non-profit groups and charitable organizations that fall within our geographic operating areas.

Some of the investments in 2010 included:

North Bay & District Hospital
Foundation Walk/Run, North Bay, ON

The Town of Hearst,
Pitch-In Campaign, Hearst, ON

Lucknow & District Kinsmen Club, 2010
Music in the Fields, Lucknow, ON

Teddy Bear Picnic, Leduc County, AB

Warburg Canada Day, Warburg, AB

Kapuskasing Heritage Lumberjack
Festival, Kapuskasing, ON

Williams Lake Stampede
Association, Williams Lake, BC

Tumbler Ridge Public Library,
Tumbler Ridge, BC

Dungannon Super Pull, Dungannon, ON

Light Up Warburg, Warburg, AB

Emperor's Challenge Mountain
Run, Tumbler Ridge, BC

The Capitol Centre, North Bay, ON

The Nipigon Food Bank, Nipigon, ON

2010 Rural Women's Conference
'Going Lean, Green and Everything
in Between,' Stony Plain, AB



“Capital Power deserves special mention. It could have donated some money and had its logo plastered all over the place. Instead, it chose to do something that showed they are a part of this community and want to give something back to it. Employees volunteered their time, showing that giving back to the community is a value that runs deep in the organization.” **TERENCE HARDING** *Edmonton Metro News*

FOSTERING EDUCATION AND BUILDING CAREERS

We support students pursuing post-secondary education by providing financial assistance and offering hands-on workplace experiences. **Scholarships and bursaries awarded in 2010 included:**

- A student in Williams Lake to attend the Williams Lake Campus of Thompson Rivers University in British Columbia;
- Post-secondary education for a Williams Lake graduating high school student;
- Two paid summer internship positions at the Genesee Power Plant for students interested in pursuing power engineering through CAREERS: The Next Generation; and
- Two scholarships through the Government of Alberta's innovative Apprenticeship and Industry Training Program.

HONDA EDMONTON INDY

Our sponsorship of the Honda Edmonton Indy, and our Red Friday event, marked the beginning of an ongoing relationship with the **Edmonton Garrison and the Military Family Resource Centre (MFRC)**, a non-profit organization providing critical support and services to the families of military personnel.

During Red Friday, our employees and their families volunteered alongside MFRC personnel. Record sales of MFRC merchandise were matched by Capital Power as a donation.

“We are extremely thankful for the partnership that has developed between the MFRC and Capital Power,” said Roza Parlin, Executive Director of the Edmonton Garrison MFRC. “Their belief in our cause can clearly be seen in this extremely generous offer of matching funds raised through Yellow Ribbon Merchandise at the Honda Indy Edmonton. What an amazing gift for our troops and their families!”

GREY CUP FESTIVAL

All you had to do was look skyward to witness Capital Power's presence at the 2010 Grey Cup Festival, which transformed Edmonton's Sir Winston Churchill Square into Huddle Town for four days leading up to the Canadian Football League's championship game.

Easily the biggest attraction at the Grey Cup Festival, the **Capital Powered Zipline whisked more than 2,200 people over Huddle Town at speeds up to 50 kilometres per hour** on the 520-foot-long, 80-foot-high thrill ride.

While the zipline was free to the public, riders were encouraged to make a donation to the Edmonton Garrison MFRC in exchange for an action photo of their ride. Enthusiastic ride-goers donated more than \$13,000, including a \$1,700 donation from a group of Edmonton firefighters. Capital Power matched 100% of the funds raised, resulting in a total donation of \$26,815 to the MFRC.

10+

THE CAPITAL POWERED ART PROGRAM IS BRINGING MORE THAN TEN MAJOR EXHIBITIONS FROM THE NATIONAL GALLERY OF CANADA



SUPPORTING ARTS AND CULTURE

The Capital Powered Art program, now in year two of a three-year agreement with the Art Gallery of Alberta (AGA), is bringing more than ten major exhibitions from the National Gallery of Canada to the AGA. In 2010, Capital Powered Art was responsible for exhibitions featuring Francisco Goya, M.C. Escher, and Giovanni Battista Piranesi.



We were honoured to be nominated for a National Philanthropy Day Award by the AGA for the unique Capital Powered Art program.

CONTINUOUS COMMITMENT TO HEALTH AND SAFETY

Capital Power entered into a **three-year partnership with STARS (Shock Trauma Air Rescue Society)** in 2010 to support the Critical Care and Transport Medicine Academy. STARS is an integral part of our emergency response plan at the Genesee Generating Station.

Through this innovative education and training opportunity, vital health-care education is delivered to both rural and urban medical professionals seeking to develop the specialized skills required for critical care and transport medicine.

ENCOURAGING INNOVATION AND CREATIVE THINKING – UNIVERSITY OF ALBERTA FESTIVAL OF IDEAS

The University of Alberta's Festival of Ideas is an interactive and inclusive forum that **facilitates creative thinking about how to respond to the challenges of our time**. As the festival's founding sponsor, we presented the first Capital Power Lecture Series in 2010, featuring Pulitzer-Prize winning author Dr. Jared Diamond. **Approximately 6,700 people attended the festival's 16 events in venues across Alberta in 2010.**

We are also helping to sustain this unique biennial festival, with a commitment to multi-year funding until 2014. We believe that the festival has an important role to play in nurturing learning and critical thinking, raising the profile of some of today's leading thinkers, and bringing further global recognition to Edmonton and the University of Alberta.



“We strongly believe that government, academia and industry must continue to work together. We need to explore options so we can make intelligent, well-informed decisions as we move forward on the path to a smaller carbon footprint. Centres like this one help build, improve and enhance research excellence and research capacity. They help our country and our province innovate and, ultimately, create jobs and investment.”

BRIAN VAASJO Capital Power President and CEO



Protecting the environment

Companies and individuals each have an environmental footprint. Collectively and individually, we all can have an impact with the choices we make.

At Capital Power, we choose to keep our facilities well-maintained and invest in research technologies for the future.

Capital Power:

- Uses the best commercially-available technology;
- Has an award-winning land reclamation program;
- Works with and within the community to discover innovative environmental practices;
- Works to operate our facilities safely, efficiently and with good maintenance practices; and
- Does not operate in or near protected areas and areas of high biodiversity.

RESEARCHING TECHNOLOGY FOR A CLEANER FUTURE

In July 2010, Capital Power and four industry partners, along with the Government of Alberta, **announced support for the newly opened \$21 million teaching and research centre at the University of Alberta's Faculty of Engineering.**

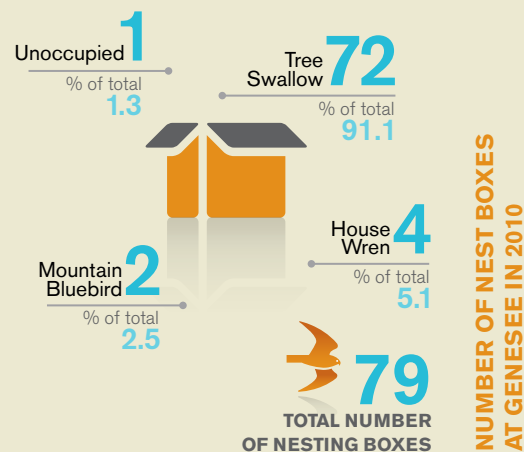
The Canadian Centre for Clean Coal/Carbon and Mineral Processing Technologies will help educate the next generation of clean energy engineers and cultivate new technologies to process minerals, produce clean coal, and **reduce greenhouse gas emissions.**



GENESEE LAND AND BIODIVERSITY PERFORMANCE

At the Genesee Generating Station and Coal Mine near Warburg, Alberta, we are **working to return the land to an equal or better state than before it was mined**, and to protect local habitat and species.

The Genesee mine licence has a comprehensive land reclamation plan, including the re-establishment of wetlands and natural creek bodies, and the development of wildlife corridors. We protect and enhance biodiversity by developing new ways of diversifying natural landscapes that can sustain multiple land uses.



RECLAMATION HIGHLIGHTS

In 2010, a variety of tree species were **planted on approximately 30 hectares of Genesee lands**. Approximately 110,000 Spruce, Aspen and Willow seedlings were planted to create a more diverse landscape that can sustain multiple land uses.

Land reclaimed for agricultural purposes is rented out to local farmers and is used to grow canola, barley, wheat, and alfalfa, or as pasture for cattle. In 2010, approximately **950 cows and 950 calves grazed on the Genesee community pasture**.

Mountain Bluebirds benefit from the provision of nesting habitat, and, in 2009, we initiated an ongoing bluebird nesting box project on lands around the Genesee Generating Station. While the goal is to **increase Mountain Bluebird populations**, the other species found in the nesting boxes are also valuable species to the local ecosystems.

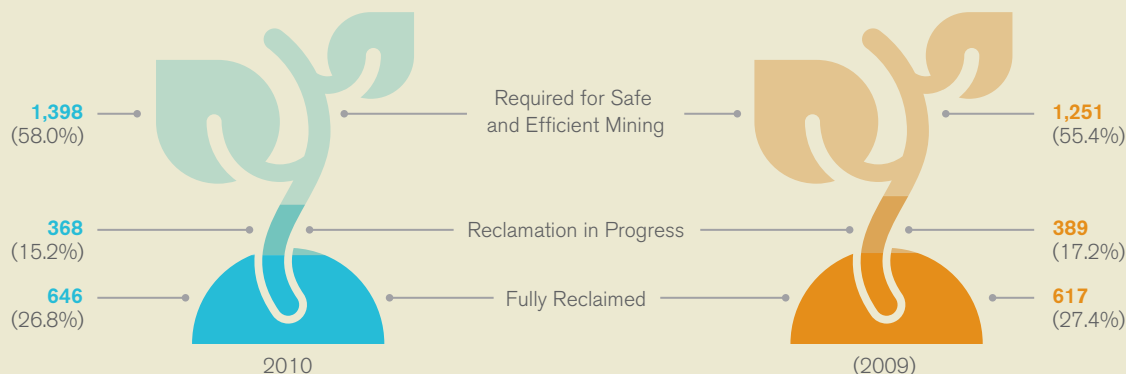
Research is being carried out with the University of Alberta and others to look at ways to **create forested areas as part of the reclaimed mine lands**. These initiatives include live root transfer, Aspen tree seedling selection, and the establishment of hybrid Poplar plantations.

INNOVATIVE LAND RECLAMATION

Our award-winning land reclamation continues to yield excellent results of previously mined areas into fields for crops and grazing.

In addition to reclaiming significant portions of land for agricultural purposes, we are also finding ways of increasing biodiversity and sustainability by establishing forested areas and by planning for wetlands that will provide important wildlife habitats.

2,412
TOTAL LAND IN 2010
COMPARED TO 2,257 IN 2009



GENESEE MINE AREA AND RECLAMATION SUMMARY (HECTARES)



7th

YEAR OF MONITORING
AT GENESEE

AIR MONITORING PROGRAM

The air monitoring program tracks potential long-term effects of air emissions on ecological receptors in the Wabamun-Genesee area. To date, no adverse effects have been observed. Full results of this monitoring program will be available later in 2011 and will be reported in our 2011 Corporate Responsibility Report (CRR).

The air monitoring program includes the **Stack Emissions Monitoring program**, Acid Deposition program, Mercury Assessment program, and the Regional Ambient Air Quality program (in co-operation with the West Central Airshed Society).

BIO-MONITORING

Capital Power and TransAlta conduct a special monitoring program that studies the long-term effects of local power plants on land, air, water and wildlife. Baseline monitoring occurred in 2004, prior to the startup of Genesee 3, and **2010 marks the seventh year of monitoring**. All receptors (air, aquatics, terrestrial and wildlife) are monitored every five years with select receptors, such as surface

water from the cooling ponds and air emissions, being monitored annually. 2010 marked the third year of monitoring all receptors. Results will be reported in our 2011 CRR.

Initiatives include:

- Monitoring red-backed voles and muskrat populations. Tissue samples are taken to measure for possible chemicals of potential concern;
- Sediment quality in area lakes;
- The number and type of organisms (e.g. benthic invertebrates) that live in or on river or lake bottoms, such as aquatic worms, mayflies and stoneflies;
- Fish tissue, taken from fish in area lakes, the cooling ponds, and the North Saskatchewan River;
- Surface water quality; and
- Groundwater quality in the area of the power plants.



WILDLIFE MONITORING

Our wildlife monitoring program includes monitoring the nesting of peregrine falcons at Genesee, analyzing and surveying the habitats of ungulate (e.g. deer, moose) populations, and surveying the over-wintering migratory birds, raptors and owls, songbirds and amphibians. **Our operations do not affect any wildlife on the International Union for Conservation of Nature and Natural Resources Red List species list.**

TRACKING TO LEARN FROM A LOCAL COUGAR

We fund research into the habits of cougars along the North Saskatchewan River valley near the Genesee Generating Station. Cougars have been moving eastward along the river over the past few years, and wildlife managers have little information about their habits in populated areas. In December 2010, a cougar was successfully collared and released by a team led by Kyle Knopff, PhD. Data gathered from the GPS collar will give biologists an opportunity to understand the cougar's movements and range in the Genesee area. After a year, the collar automatically releases itself.

Male departure:
September 24, 2009

Returns:
May 13, 2010

MIGRATION ROUTES OF OUR PEREGRINE FALCON



Central Venezuela

November 15, 2009
to April 12, 2010

PEREGRINE FALCONS AT HOME AT GENESEE

For years, the Genesee Generating Station has been home to peregrine falcons. They have developed a public following through our live 'bird cam' at www.capitalpower.com/falcons and have been integrated into the local Thorsby schools' science curriculums for grades 1 and 7. The Grade 1 curriculum discusses migration while the Grade 7 class learns about peregrine falcons and the history surrounding the effects of pollutants on the North American populations; both classes monitor the live feed camera in the nest box on a weekly basis.



"The co-operation between the museum and Capital Power has produced a result that serves as a nearly ideal example of how paleontological heritage interests and industry can be accommodated within B.C."

RICH MCCREA Curator of Palaeontology at the
Peace Region Palaeontology Research Centre

Through a satellite transmitter attached to the male peregrine falcon (the female's transmitter was lost), we were able to record migration over an approximately eight-month period from September 2009 to May 2010. **The male flew south to central Venezuela, 6,600 kilometres from Genesee, in 52 days.** He spent 147 days on his wintering grounds in central Venezuela. On May 13, 2010, the male returned to Genesee after a 32-day return journey. He joined his mate from 2009, who arrived at Genesee on April 28, 2010.

QUALITY WIND ENVIRONMENTAL ASSESSMENT

The Government of British Columbia granted Capital Power an **Environmental Assessment Certificate for the Quality Wind Project** located near Tumbler Ridge, British Columbia. An extensive Environmental Assessment of the site showed that the project can be developed in an environmentally sound manner that respects stakeholder and community values.

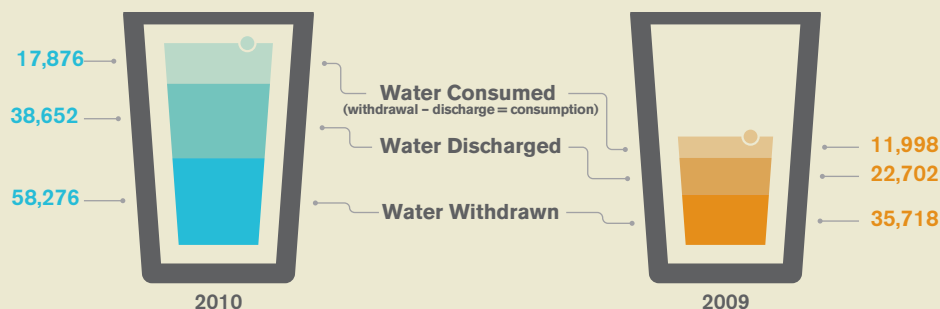
The Environmental Assessment looked at the project's potential impacts to land, air, and water. Detailed field assessments were completed on bird, bat, fish and wildlife habitats, as were archeology and traditional land use surveys. Stakeholders were engaged to understand their concerns and interests in the project area.

Working with the Tumbler Ridge Museum Foundation and Peace Region Palaeontology Research Centre from the early stages of the project, a joint Paleontology Encounter Procedure was developed to avoid or reduce adverse effects to paleontological resources discovered during construction of the 3,062 hectare site.





APPROXIMATE WATER WITHDRAWALS AND DISCHARGES (MEGALITRES)



Water withdrawal and discharge statistics do not include water displaced by hydroelectric facilities.

Sustaining water for the future

More than 80% of our water use is drawn from the North Saskatchewan River to support the power facilities at Genesee and Clover Bar.

In 2010, we joined the North Saskatchewan Watershed Alliance, part of the Alberta government's Water for Life initiative. The alliance developed a draft Integrated Watershed Management Plan that will guide the protection, maintenance and restoration of the North Saskatchewan River watershed, that balances environmental, social and economic needs, and to achieve the three goals of the Water for Life Strategy:

- 1 Safe, secure drinking water supply;
- 2 Healthy aquatic ecosystems; and
- 3 Reliable, quality water supplies for a sustainable economy.

The Watershed Management Plan is expected to be finalized in December 2011. It will advise the Government of Alberta, municipalities, government agencies and industry about the action needed to maintain and improve the water quality and quantity in the North Saskatchewan River.

WATER WITHDRAWALS FOR PLANT OPERATIONS

Our water withdrawals were higher in 2010 due to efforts to improve the water quality of the Genesee Generating Station's cooling pond and to help reduce the levels of Total Dissolved Solids (TDS) in cooling pond waters. (A cooling pond is a man-made body of water primarily formed to supply cooling water to a nearby power plant.)

Most of the water remaining in the cooling pond after being withdrawn from the river was not 'consumed' by the Genesee facility.

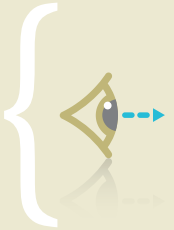
The additional water was cycled through the cooling pond on a more frequent basis, improving water quality for plant operations and improving the quality of discharge from the cooling pond back into the North Saskatchewan River.

Most of this additional water added to the cooling pond will evaporate over time and return to the water cycle, which is why the concentrations of TDS in the pond increase over time and why the pond must be refreshed with added water to dilute the TDS.

Water sources for other facilities include groundwater, municipal water and recycled water. For example, at the Williams Lake biomass facility, treated water is purchased from the municipality for the plant's cooling process. Each litre of water gets recycled between five and ten times, depending on the evaporation rates, time of year, and operating status. Williams Lake received 1,748 megalitres in 2010 from the City of Williams Lake compared to 1,018 megalitres of water in 2009 because the plant operated for the full year in 2010 (operations were curtailed from May to July 2009).



Stakeholder support is critical
to achieving our vision.



Listening to and learning from stakeholders – consultation and engagement

STAKEHOLDER ENGAGEMENT PHILOSOPHY

Stakeholder support is critical to our vision of becoming one of North America's most respected, reliable and competitive power generators.

At every stage of a facility's life cycle, we draw on best practices in public consultation and communications, with a goal of ensuring that critical infrastructure is permitted, built and operated in a way that aligns with the interests and priorities of the community. **We are committed to engaging stakeholders at all stages of a project's life-cycle – development, construction, operations, and through decommissioning.**

Consultation programs for three of the company's projects are highlighted below, each demonstrating a different aspect of our consultation.

QUALITY WIND PROJECT – ABORIGINAL CONSULTATION



Over the past 20 years, the legal and policy requirements for **consultation with Aboriginal stakeholders** have evolved significantly. While the law states the Crown has a duty to consult with

Aboriginal communities, companies proposing projects in Aboriginal traditional and treaty territories often take a proactive and extensive role in ensuring this process is done well.

We committed to direct involvement in Aboriginal consultation during the development of the **142-megawatt Quality Wind Project, located in Treaty 8 territory of northeastern British Columbia** (about 10 kilometres northeast of Tumbler Ridge, B.C.). Working within the B.C. Environmental Assessment (EA) process, we initiated a dialogue and engagement process with nine First Nations and Aboriginal communities and one tribal association. The process began in late 2007, with an Environmental Assessment Certificate granted in 2010.

"This was the most extensive engagement work the company had undertaken to date with Aboriginal communities," said Jay Shukin, Capital Power's director of Public Consultation. "Our willingness to listen, learn and consider ideas from the Aboriginal communities allowed us to improve our project plan in a relatively short time frame."

A priority for the First Nations and Aboriginal communities was that the project be developed in a manner that was environmentally sound and respected cultural values. We discussed study details with Aboriginal representatives, and engaged communities in traditional land use and archeology studies related to the project.

We also responded to First Nation interests in economic opportunities arising from the project.

Based on its consultations, Capital Power identified a number of communities whose traditional and contemporary interests clearly overlapped with the project area. **The company is committed to working on long-term benefit agreements with those communities, which include commitments for ongoing dialogue and engagement.**

We responded to First Nations' interest in economic opportunities arising from the project, and developed procurement processes specific to Aboriginal businesses. Throughout the initial construction, Aboriginal businesses provided more than half of the total hours of work on construction activities in 2010 and through early 2011.



37

LANDOWNERS IN THE GENESEE MINE
EXTENSION PROJECT AREA



PORT DOVER & NANTICOKE WIND PROJECT

Currently in the permitting phase, the 105-megawatt Port Dover & Nanticoke Wind project is located in the Counties of Haldimand and Norfolk, approximately 125 kilometres southwest of Toronto, Ontario.

We are committed to developing the project in a manner that is **environmentally sound and respects the values and interests of the local community**. We have been meeting with local landowners and stakeholders since the project was acquired in November 2009. In 2010, a project newsletter was distributed, two open houses were held, project presentations were provided, and project meetings were held with area government stakeholders. A project website, email address and local project phone number for stakeholders were also provided to facilitate comments and questions directly to the project team.

GENESEE GENERATING STATION AND MINE – COMMITTED TO A SOCIAL LICENCE TO OPERATE

For over 20 years, the Genesee Generating Station has operated near the town of Warburg, Alberta, west of Edmonton. The facility completed its most recent expansion, Genesee 3, in 2005, one of the most advanced, fuel-efficient, and environmentally progressive coal-fired facilities in Canada. With practice, we have learned to improve **‘being part of the community’** by working with the local stakeholders and having open, transparent lines of dialogue.

ONGOING COMMUNICATION CHANNELS

The Genesee Community Advisory Task Group (CATG) represents residents living within a 25-kilometre radius of the Genesee Generating Station. The group meets three times a year to discuss operational and community issues related to the power plant and mine, and to review our outreach and community engagement initiatives.

After each CATG meeting, summaries are distributed to the community and are available on Capital Power’s website.

www.



The Genesee Generating Station Connection

Newsletter provides bimonthly information to local residents, including updates on plant operations and continuous reporting on environmental emissions levels and compliance. Back issues are available at **www.capitalpower.com**.

www.

SPECIFIC GENESEE CONSULTATION PROJECTS IN 2010

Genesee Mine Extension Project

Consultation on the proposed extension of the existing Genesee Mine permit area began in 2010. The extension is proposed to provide a secure supply of fuel to existing operations. There are 37 landowners, 22 with land and homes and 15 with land only, included in the project area.

We expect land negotiations to be completed

by 2013. Consultation activities included two special edition newsletters distributed to the local community, two open houses, and project information shared with Leduc County, the Village of Warburg, the Genesee Synergy Group (local industry participants who meet annually).



We have been offsetting emissions at Genesee 3 to the level of a natural gas combined-cycle plant since the facility began operating in 2005.

Consultation on the mine extension continues through 2011, prior to the filing of the application anticipated for the fall of 2011. We continue to engage with a variety of stakeholders, including, but not limited to, local farmers and businesses, county council, Warburg council, local industry, provincial regulators, and local First Nations.

Genesee Water Licence Application

In June 2010, we applied to Alberta Environment (AENV) for an additional annual water diversion of 12 million cubic metres from the North Saskatchewan River for the Genesee Generating Station. Genesee had been operating under a one-year temporary diversion licence, which expired in December 2010. The additional water was needed to improve the quality of water within the cooling pond (See 'Water Withdrawals for Plant Operations' on page 40). Application information was provided in the Genesee community newsletter and a local open house was held in June 2010. The licence was granted by AENV in October 2010.

Genesee 3 Greenhouse Gas Application

In March 2010, we filed an **application with the Alberta Utilities Commission (AUC)** requesting an amendment to our operating licence for the Genesee 3 facility. Our application sought approval to remove Genesee 3's requirement to offset emissions to the level of a natural gas combined-cycle (NGCC) plant and replace it with the Alberta government's Specified Gas Emitters Regulation (SGER), which requires a 2% annual improvement in greenhouse gas performance, growing to a maximum of 12% in six years.

The NGCC requirement (a 50% offset) arose out of a voluntary commitment made by our predecessor company in 2001, when provincial government regulatory requirements for greenhouse emissions in Alberta did not exist. The SGER came into force in 2007. The two standards have different rules for qualifying greenhouse gas offsets.

Our application noted that Genesee 3 was unique in being subject to two distinct emission reduction requirements, while other coal-fired power plants

in Alberta are subject to the SGER only. We proposed that the SGER, which was enacted after Genesee began operations, should supersede the NGCC requirement.

Following a public hearing in October 2010, at which several organizations and individuals opposed our application, the AUC issued its decision in January 2011. The application was denied, with the AUC stating that the SGER was not intended to supersede or replace the NGCC requirement, and that it was not in the public interest to relieve Capital Power of the burden of adhering to both standards.

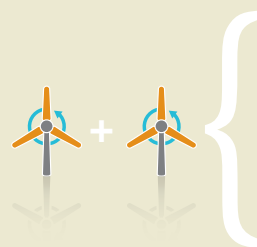
We have been **offsetting emissions at Genesee 3 to the level of a natural gas combined-cycle plant** since the facility began operating in 2005, and we continue to do so. Capital Power complies with both sets of regulations through a mix of emission reduction technology, our industry-leading emission offset program (see page 53), and payments into a provincial technology fund that provides credits against our SGER obligations.



{ How are we doing ?

We are committed
to creating a high
performance
work environment.

***PERFORMANCE**



2

IN 2010, WE COMMENCED
DEVELOPMENT OF TWO
CONTRACTED WIND FARMS

OUR STRATEGY

Our corporate strategy comprises a business strategy, which sets out how we will become a competitively priced power producer, and a financial strategy, designed to provide consistent access to low-cost capital. This is supplemented by strategies for managing risk, ensuring safety and becoming a desirable employer.

Performance



10,000

MEGAWATTS BY 2020
IS OUR GROWTH PLAN



KEY ELEMENTS OF OUR STRATEGY INCLUDE:

Geographic focus

Creating 'networked hubs' of assets in a limited number of target markets allows management of the assets on a portfolio basis, application of market expertise, and economies of scale.

Technology focus

Developing and operating a limited number of power generation technologies helps build operating, maintenance and construction expertise, better supplier relationships, and management of common equipment spares.

Investment-grade credit rating

Maintaining access to low-cost capital through the business cycle by balancing contracted and merchant generation supports our credit rating and provides equity owners with a consistent market-competitive dividend.



Contracted and Merchant Market Focus

Market knowledge
Emissions management
Reduced overheads

Portfolio Management (networked hubs)

Fundamental forecasting
Trading effectiveness
Portfolio optimization

Technology Focus

Operating efficiencies
Economies of scale

Business Strategy

Competitively priced producer

Risk and Resource Strategies

Proactive protection of business

Financial Strategy

Consistent access to low-cost capital

Contracted
Operating Margin
Investment-grade
Credit Rating
Market-driven,
Consistent Dividend

Managed Risk

Enterprise risk
Emissions exposure
Commodity exposure

Regional and Fuel Diversification

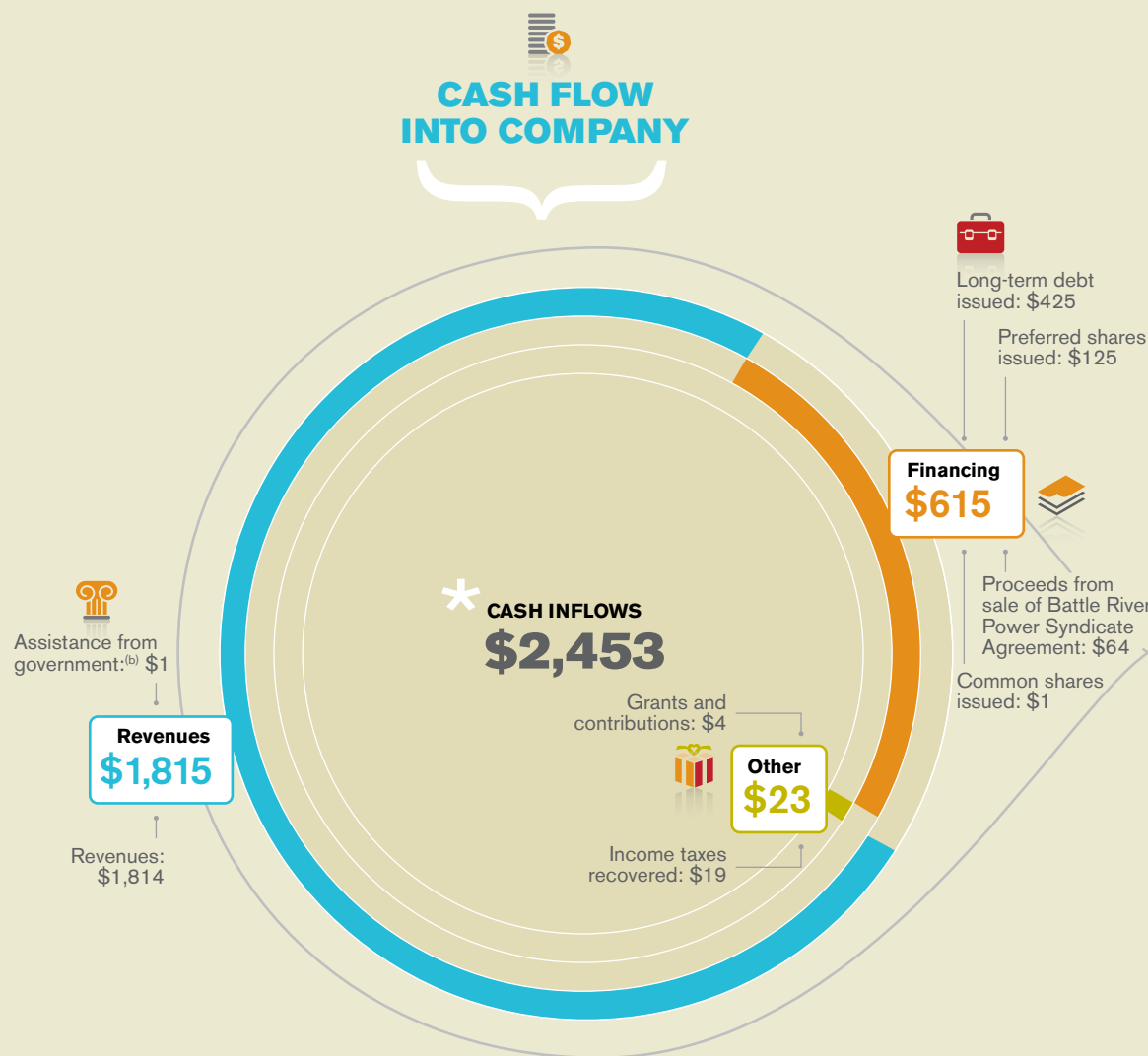
Safe Workplace
Desirable Employer

ECONOMIC BENEFITS^(a)

(in millions of dollars)

Economic benefits from our business touch thousands of individuals and companies across North America and beyond, including equity and debt holders, local suppliers, governments, employees and counterparties.

The following infographic combines information from Capital Power's 2010 financial statements with the more specific financial disclosures from the GRI performance indicators. The result paints a picture of the stakeholders who are economically impacted by Capital Power's business.



(a) All data in millions of dollars. This graphic is based on information from Capital Power's 2010 financial statements, and includes information on certain specific GRI performance indicators. It is not a substitute for the financial statements, which can be found online at www.capitalpower.com and www.sedar.com. The graphic does not include: \$8 million in other expenses, \$15 million in other income, \$(28) million change in non-cash working capital, or \$(3) million in foreign exchange losses on cash held in a foreign currency.

(b) We receive approximately \$1.1 million per year from the Government of Canada through the Wind Power Production Incentive program, created to encourage the development of wind energy capacity. The incentive is approximately \$0.01 per kilowatt hour of production from our Kingsbridge Wind Power Project. Eligible recipients can receive the incentive on the first 10 years of production.

(c) \$44 million of interest on long-term debt was capitalized.

(d) Includes other capital investments, such as \$15.7 million to acquire carbon offsets. Excludes capitalized interest and staff costs, shown elsewhere on this graphic.

(e) In 2010, we spent \$419 million with our top 25 suppliers of goods and services. Of this amount, \$255 million, or 61%, was defined as local spending, where the shipping destination and supplier site were both in the same jurisdiction.

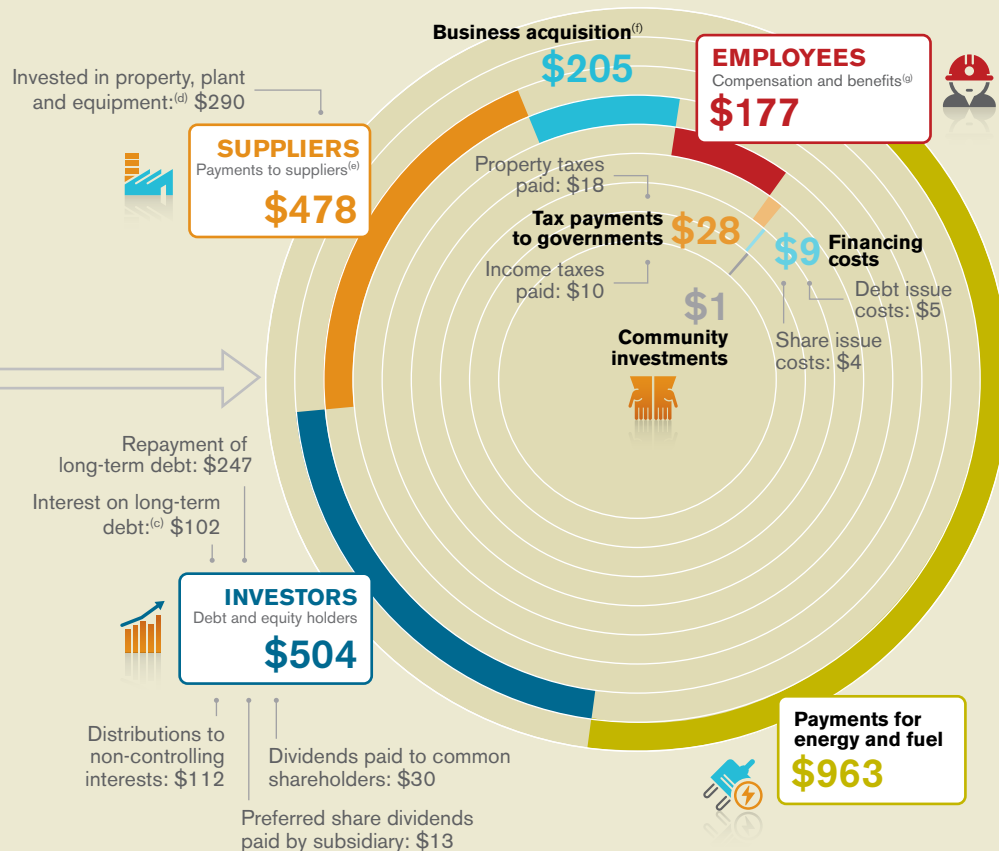
(f) Business acquisitions net of acquired cash.

(g) Includes capitalized staff costs of \$3 million.



2010 Business Acquisition:
Island Generation

BENEFITS TO THE STAKEHOLDERS



FINANCIAL HIGHLIGHTS

(in millions of dollars, except
shares and per share amounts)

Year ended
Dec 31, 2010

Revenues	\$ 1,760
Gross margin ⁽¹⁾	\$ 768
Operating margin ⁽¹⁾	\$ 520
Net income	\$ 137
Earnings per share	\$ 0.50
Earnings per share ⁽¹⁾ (normalized)	\$ 1.40
Dividends declared per share	\$ 1.26
Funds from operations ⁽¹⁾	\$ 354
Capital expenditures	\$ 337

(1) Gross margin, Operating margin, Earnings per share (normalized) and Funds from operations are Non-GAAP financial measures and do not have standardized meanings under GAAP and, therefore, may not be comparable to similar measures used by other enterprises. See 'Non-GAAP Financial Measures' in the company's annual Management's Discussion and Analysis for its year ended December 31, 2010, which is available on the company's website at www.capitalpower.com and on SEDAR at www.sedar.com.

www.sedar.com



61%

OF OUR TOP 25 SUPPLIER ACCOUNTS
WERE LOCAL SUPPLIERS





90%

CAPITAL POWER IS A SAFE AND SKILLED
OPERATOR WITH A HIGH-OUTPUT FLEET
AVERAGING 90% AVAILABILITY IN 2010.

OPERATING
PERFORMANCE

ASSISTANCE FROM GOVERNMENT

We concluded participation in a multi-year \$33 million research project to complete a front-end engineering design study of a clean coal project. The company, the Government of Canada, and the Government of Alberta each contributed \$11 million to the study.



\$33 MILLION

RESEARCH PROJECT TO COMPLETE
A FRONT-END ENGINEERING DESIGN
STUDY OF A CLEAN COAL PROJECT

We receive approximately \$1.1 million per year from the Government of Canada through the **Wind Power Production Incentive program**, created to encourage the development of wind energy capacity. The incentive is approximately \$0.01 per kilowatt hour of production from our Kingsbridge I Wind Power Project. Eligible recipients can receive the incentive on the first 10 years of production.

We are partnering with TransAlta and Enbridge to develop one of the world's largest carbon capture and storage (CCS) projects as part of the Keephills 3 power generation facility in Alberta, which is jointly owned with TransAlta and will be operational later in 2011. The CCS project, called Project Pioneer, will be designed to capture approximately 1 million tonnes of greenhouse gas emissions annually. The project has signed a letter of intent with the Government of Alberta to receive funding from the province's \$2 billion CCS fund. The Government of Canada is also contributing toward the project through its Clean Energy Fund.

LOCAL HIRING AND PROCUREMENT

In 2010, we spent \$419.4 million with our top 25 suppliers of goods and services. Of this amount, \$254.9 million, or 61%, was defined as local spending, where the shipping destination and supplier site were both in the same jurisdiction.





Building capacity with a reliable and competitive foundation

In 2010, we committed approximately **\$1 billion to new growth opportunities**, which was twice the company's capital development target. Our investments support prudent, disciplined growth and meet our stringent criteria for rates of return, types of facilities and market focus.

PUBLIC POLICY

In accordance with the Federal Accountability Act, we report all lobbying of Canadian federal Designated Public Office Holders (DPOHs) on a monthly basis. We participated in 16 meetings with DPOHs in 2010. The meetings were typically regarding greenhouse gas and air emissions policy. We participated in discussions regarding capital stock turnover for coal-fired power plants, market structure, greenhouse gas and other air emissions,

and **electricity transmission policy** throughout the jurisdictions in which we operate.

As a corporation influenced by legislation and regulations, we have an interest in supporting and participating in the political process to create awareness of the company's operations and the issues affecting the power generation industry. The company also seeks to build working relationships with elected officials and candidates for office.

We contributed no monies to Canadian federal parties in 2010 and, in accordance with our political contribution policy, the company does not make cash donations to provincial political parties. Total expenditures on various political events and fundraisers across all provinces in Canada in 2010 were \$21,439.



RISKS DUE TO CLIMATE CHANGE

Our business risks are described in Management's Discussion and Analysis, dated March 8, 2011, from pages 44 to 47, and includes extensive discussion of environmental risks, including those related to greenhouse gas regulation and climate change. In addition, our strategy and actions on environmental issues related to greenhouse gas emissions are described earlier in the Environment section of this report.





Responsibly managing greenhouse gases and air emissions

Greenhouse gas (GHG) emissions volumes and emissions intensity were essentially unchanged in 2010. Across our North American operations, GHG emissions totalled 11.68 million tonnes (MT) in 2010, down marginally from 11.85 MT in 2009. **In 2010, Capital Power also permanently retired 461,000 tonnes of GHG offsets in the Alberta market.**

Year-over-year changes in GHG emissions and emissions intensity are generally driven by:

- changes in power production volume (maintenance outages at thermal facilities can have a significant impact on single-year results);
- the introduction of new technologies that increase efficiency or decrease emissions; and

- changes in our generating fleet (the development and acquisition of cleaner facilities add to emissions volumes while decreasing emissions intensity, whereas the addition of non-emitting sources leaves emissions volumes unchanged and decreases emissions intensity).

Production volumes and technologies in 2010 were similar to 2009, as the addition of the Island Generation facility to our fleet occurred late in the year, having little impact on the full-year results.

Greenhouse gas emissions volumes and emissions intensity were essentially unchanged in 2010.

\$15.7 MILLION

IN OFFSETS WERE
PURCHASED IN 2010



LEADING EMISSION OFFSET PRACTICES

In addition to reducing emissions at power generation facilities, we have systematically developed specialized expertise in the origination, purchase, and sale of verified emission offsets.

Approximately \$15.7 million in offsets were purchased in 2010, and 26 purchase and sale agreements were in place.

Our early, active and responsible participation in emission offset practices has delivered more than 7 million tonnes of offsets since 2007, and we have purchased more than \$30 million in offsets over the past three years. Emission offsets are audited and verified by independent third parties.

In 2007 and 2008, the first two years emission reductions were mandated in Alberta, we retired 24% of all emission offsets in the province. That record has continued with 570,000 tonnes retired

in 2009 and 461,000 in 2010. The 2010 decrease in emission offset retirements is attributed to the 2009 expiry of our obligations of the Battle River Power Purchase Agreement and its associated greenhouse gas emission reduction obligations. Through the sale of emission offsets, we also helped other Alberta companies achieve their compliance obligations in 2010 at lower cost.

We continue to invest in emission offset markets and have become an active buyer of Climate Reserve Tonnes (CRT), offsets created under a national offsets program focused on the United States carbon market.

We are an active member of the International Emissions Trading Association and an executive member of the Industry Provincial Offsets Group. We also developed two of the Alberta Offset System Quantification Protocols.

PROJECTS



FORESTRY PROJECTS

We have purchased carbon offsets known as Climate Reserve Tonnes from various forestry projects recognized by the Climate Action Reserve (CAR), a national offsets program in the United States carbon market. CAR forestry projects create offsets through sustainable forest management and the protection of forests. As defined more specifically in CAR's forestry protocols, it is a planned set of activities designed to increase removals of carbon dioxide from the atmosphere, or reduce or prevent emissions of carbon dioxide to the atmosphere, through increasing and/or conserving forest carbon stock. These activities are known as **(1) reforestation**: the restoring of tree cover, **(2) improved forest management**: activities that maintain or increase carbon stocks on forested land, and **(3) avoided conversion**: preventing the conversion of forest land into non-forest land.

NITROUS OXIDE ABATEMENT PROJECT

The Nitrous Oxide Abatement project, which consists of an installation of a dedicated nitrous oxide abatement catalyst, is an Alberta based offset project creating emission reduction offsets under the Specified Gas Emitters Regulation. **This project produces offsets of approximately 400,000 tonnes per year by reducing nitrous oxide**, a heat-trapping greenhouse gas that also contributes to ozone depletion.

* We have purchased offsets from a variety of Alberta and CRT projects in 2010.

Some of these project types include:

FORESTRY • LANDFILL GAS • OZONE DEPLETING
SUBSTANCES • NO TILL AGRICULTURE • COMPOSTING

Hg
H₂O

MERCURY EMISSIONS INCREASED

12.04

MICROGRAMS PER MEGAWATT
HOURS (MG/MWh) IN 2010



9.29

MICROGRAMS PER MEGAWATT
HOURS (MG/MWh) IN 2009

HIGHER NATIVE MERCURY CONTENT IN GENESEE COAL INCREASED MERCURY EMISSIONS

In Canada, Capital Power's mercury emissions increased from 13.35 micrograms per megawatt hours (mg/MWh) in 2009 to 16.40 mg/MWh in 2010 for two reasons.

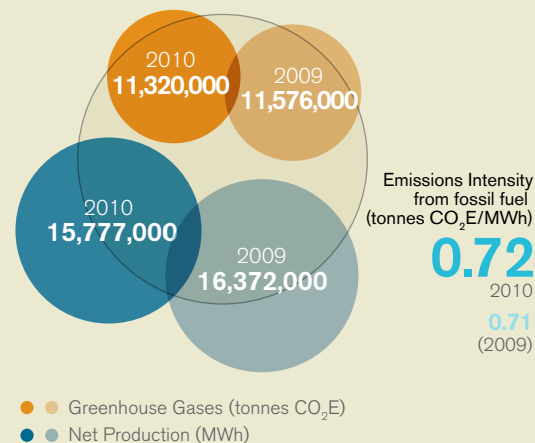
1

Genesee Coal: Coal for the Genesee Generating Station in Alberta is mined from coal seams at the neighbouring Genesee mine. A natural component of coal is mercury and, depending on the coal seam, the amount of native, or natural, mercury varies. In 2010, coal from the mine was higher in mercury content compared to 2009.

2

Williams Lake: Although accounting for a small portion of the increase, the estimated emissions at Williams Lake went up due to a calculation change. We determined a more accurate methodology for estimating emissions from the biomass at Williams Lake.

GREENHOUSE GAS INTENSITY FROM FOSSIL FUEL FACILITIES



Production includes the entire production from fossil fuel facilities, including the production from waste heat. CO₂E is carbon dioxide equivalent.

In 2010, we installed a new activated carbon injection (ACI) system at the Genesee Generating Station and, on January 1, 2011, the new system went into operation. The ACI technology allows the plant to achieve a capture of 70% of the natural mercury content found in the coal used to fuel the power generation at the facility. As per Alberta Regulation 34/2006, all coal-fired generators in Alberta must attain a 70% reduction in mercury emissions from the coal.



EMISSIONS INTENSITIES ⁽¹⁾

	Oxides of nitrogen (kg/MWh)		Sulphur dioxide (kg/MWh)		Total particulate matter (kg/MWh)		Mercury (mg/MWh)		Greenhouse Gases (tonnes CO ₂ E/MWh) ⁽²⁾	
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010
Canada	1.31	1.29	1.30	1.32	0.10	0.10	13.35	16.40	0.81	0.78
U.S.	0.18	0.24	0.29	0.45	0.03	0.03	0.75	1.64	0.31	0.33
All	0.95	0.98	0.98	1.06	0.08	0.08	9.29	12.04	0.65	0.65

(1) Emissions intensities include only power generation operations. Emissions intensities do not include emissions from indirect sources, such as those resulting from electricity usage at our offices. Intensity is calculated using the net production (MWh) from all Capital Power facilities, including all renewable, waste heat and fossil fuel facilities.

(2) In accordance with the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard [World Resources Institute and World Business Council for Sustainable Development (2004)], carbon dioxide released at facilities from combustion of biomass and landfill gas are not included in emissions totals and intensities.

TOTAL AIR EMISSIONS

	Oxides of nitrogen (tonnes)		Sulphur dioxide (tonnes)		Total particulate matter (tonnes)		Mercury (kg)		Greenhouse Gases (tonnes CO ₂ E)	
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010
Canada	16,300	16,400	16,100	16,700	1,300	1,250	165	208	10,029,000	9,915,000
U.S.	1,100	1,300	1,700	2,400	200	150	4	9	1,818,000	1,762,000
All	17,300	17,700	17,800	19,100	1,500	1,400	169	217	11,847,000	11,677,000

Values represent direct emissions from power generation operations.

In accordance with the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard [World Resources Institute and World Business Council for Sustainable Development (2004)], carbon dioxide released at Capital Power facilities from combustion of biomass and landfill gas are not included in emissions totals and intensities. In 2010, greenhouse

gas emissions from the combustion of biomass and landfill gas totalled 1,103,000 tonnes of CO₂ equivalent. In 2009, greenhouse gas emissions from the combustion of biomass and landfill gas totalled 626,000 tonnes of CO₂ equivalent. In 2008, greenhouse gas emissions from the combustion of biomass and landfill gas totalled 809,000 tonnes of CO₂ equivalent.



ENVIRONMENTAL UPGRADES AT NORTH CAROLINA FACILITIES REDUCE COAL CONSUMPTION AND OTHER EMISSIONS

A significant investment was made to upgrade the North Carolina facilities of Roxboro and Southport. The environmental enhancements **reduced the amount of coal burned by 50%** by replacing coal with wood and tire-derived fuel (TDF). In initial tests, pollution control equipment installed at the two facilities contributed to a 75% reduction in sulphur dioxide emissions and a 65% reduction in nitrogen oxide emissions.

FLY ASH SOLD AS BYPRODUCT FROM GENESEE 1, 2 AND 3

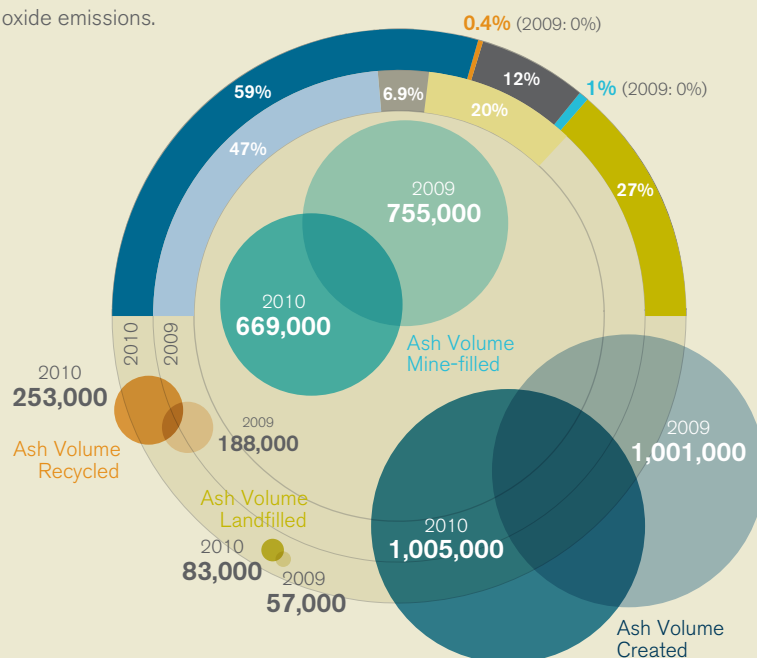
Ash is produced as a byproduct from five facilities – Genesee, Williams Lake, Calstock, Roxboro and Southport. In 2010, **the amount of ash produced at Genesee decreased slightly**, while ash production at Williams Lake, Calstock, Roxboro, and Southport increased due to the plants' availabilities.

At Genesee, approximately 60% of the fly ash captured from Units 1 and 2 is sold to concrete companies to use in cement production across North America. Until recently, we did not sell fly ash from Genesee 3 because it had a different content makeup due to the Genesee 3 emissions reduction technologies.

In 2010, however, we found that Genesee 3 fly ash works well as a soil cementing product and began selling the fly ash. It is now being used to repave county and oil lease roads. Approximately 45,000 tonnes of fly ash is expected to be required in 2011.

With ambitious growth targets, we aim to sell 100% of the fly ash from units 1 and 2, and 50% from unit 3 by 2012.

ASH RECYCLING AND DISPOSAL (TONNES)



- Marketable Fly Ash Sold (Genesee 1, 2)
- Marketable Fly Ash Sold (Genesee 3)
- Marketable Bottom Ash Sold (Genesee 1, 2)
- Marketable Bottom Ash Sold (Genesee 3)
- Recycled Ash Sold (Genesee, all units)



OZONE-DEPLETING SUBSTANCES

No ozone-depleting substances were released in 2010.

HAZARDOUS WASTE

We did not transport hazardous waste in 2010.

CLEAN AIR ALLIANCE

We participated with industry, government and non-government organizations in the five-year Clean Air Strategic Alliance Review of the Alberta Electricity Framework.

ENVIRONMENTAL COMPLIANCE

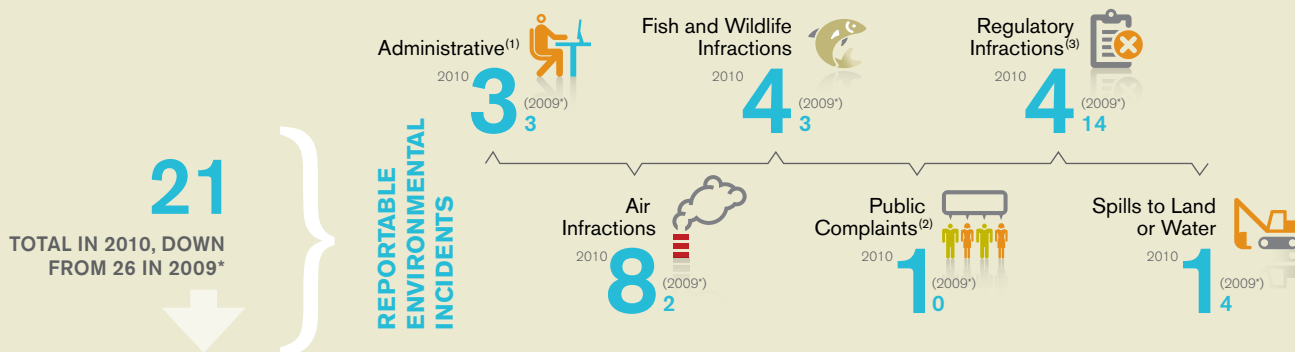
We experienced 21 reportable environmental incidents in 2010. One environmental fine was received. A penalty of \$9,600 was issued for failing to limit emissions during shutdown and normal operations, in addition to administrative incidents such as late report submissions, lapsed certifications or failures to report.

THERMAL EFFICIENCY OF THE GENESEE GENERATING STATION

We are committed to reducing our carbon footprint. Boosting efficiencies by running well-maintained

plants helps contribute to a lower carbon profile. Measuring the thermal efficiency of a power plant provides a metric indicator to benchmark against other power plants. It compares how much energy an operator gets out of a plant to how much energy is put in. **The thermal efficiency of the Genesee Generating Station is 34.3% for Genesee Units 1 and 2 and 38.5% for Genesee 3.** A report by the National Energy Technology Laboratory in the United States⁽¹⁾, which falls under the Department of Energy, cited an average efficiency of 32.5% in 2009.

(1) <http://www.netl.doe.gov/energy-analyses/pubs/NETL%20Power%20Plant%20Efficiency%20Workshop%20Report%20Final.pdf>, Page 3.



* Data is for the second half of 2009 only, following Capital Power's Initial Public Offering in July 2009.

- 1 Incidents that are administrative in nature such as late report submissions, lapsed certifications, or failures to report.
- 2 Public Complaint incidents are those that are attributable to Capital Power operations.
- 3 Regulatory infractions are incidents that contravene a regulation or other applicable law, a site permit/licence or site operating approval.



Corporate governance

BOARD OF DIRECTORS

In keeping with contemporary practices of good corporate governance, immediately following the completion of the company's Initial Public Offering in 2009, and continuing at the date of publication in 2011, Capital Power was governed by a board of 12 directors, ten of whom are independent for the purposes of National Instrument 58-101.

BOARD ROLES AND RESPONSIBILITIES

The Board of Directors oversees the management of Capital Power and is responsible for its overall direction. **The board is responsible for:**

- Management selection, retention, succession, and remuneration;
- Overseeing the development of the company's business strategy and monitoring its progress;
- Approving significant company policies and procedures;
- Overseeing timely and accurate reporting to shareholders and public filing of documents; and

- Approving major company decisions, such as: budgets; acquisitions; major capital expenditures; and documents, including such things as audited financial statements, declarations of dividends, offering circulars, and initiation of bylaw amendments.

The full terms of reference for the board are available in Appendix A of the 2011 Management Proxy Circular. Appendix C includes terms of reference for individual directors, outlines the personal and professional characteristics required for all directors, and is used as the basis for performance evaluation and recruitment. Go to **www.capitalpower.com** to view the circular.



CORPORATE GOVERNANCE PRACTICES

Our corporate governance practices are intended to meet or exceed the rules and guidelines of Canadian securities regulators, which include the following:

- National Instrument 58-101 – Disclosure of Corporate Governance Practices (NI 58-101);

- National Policy 58-201 – Corporate Governance Guidelines;
- Instrument 52-109 – Certification of Disclosure in Issuers' Annual and Interim Filings; and
- National Instrument 52-110 – Audit Committees (NI 52-110).

BOARD COMPOSITION AND INDEPENDENCE

The Board of Directors is required to have a minimum of three and a maximum of 12 directors. At the date of publication, the board consisted of 12 directors, four of whom were nominated by EPCOR pursuant to rights attached to the Special Voting Shares held by EPCOR, and eight of whom were elected by shareholders at Capital Power's annual meeting in May 2010. The board comprises 11 men and one woman.

The board is led by a non-executive chair. The board has determined that all of the directors, except Messrs. Cruickshank and Vaasjo, are independent within the meaning of applicable Canadian securities laws, on the basis that



they do not have any direct or indirect relationship with the company that could, in the view of the board, be reasonably expected to interfere with the exercise of their independent judgment.

BOARD STRUCTURE

The four standing committees of the board include the following:

- 1 Audit committee;
- 2 Corporate Governance, Compensation and Nominating committee;
- 3 Environment, Health and Safety committee; and
- 4 Keephills 3 Project Oversight committee.

All or a majority of the members of the committees are independent.

In accordance with its terms of reference, each committee is responsible for overseeing certain corporate governance matters and making appropriate recommendations to the board.

Each committee is committed to meeting or exceeding governance standards set out by various regulatory authorities and governance policy-makers, including the Canadian Securities Administrators' instruments relating to corporate governance.

Additional information on the terms of reference for each committee, and mechanisms for shareholder input, is available online in the 2010 Management Proxy Circular.



LINK BETWEEN COMPENSATION AND CORPORATE PERFORMANCE

To ensure alignment with the interests of shareholders, board directors and named executive officers are subject to share ownership guidelines, disclosed in the 2010 Management Proxy Circular.

The company's practices regarding compensation for directors are designed to attract and retain the most qualified individuals to serve on the board, to reflect the size and complexity of the industry,

and to reinforce the emphasis the company places on aligning directors' compensation with the interests of shareholders.

The company provides its directors with a compensation package consisting of an annual retainer, meeting fees, and equity-based compensation in the form of deferred stock units (DSUs).

Non-employee directors receive a portion of their annual equity retainer in the form of DSUs and are also subject to share ownership guidelines that require ownership of Common Shares and/or DSUs with an acquisition or market value equivalent to not less than three times the aggregate value of their annual cash and equity retainer.

Directors have five years from their respective dates of appointment to accumulate the required number of Common Shares and/or DSUs.



SENIOR EXECUTIVES

BRIAN VAASJO President and Chief Executive Officer

STUART LEE Senior Vice President and Chief Financial Officer

JAMES OOSTERBAAN Senior Vice President, Operations and Commodity Portfolio Management

KATE CHISHOLM Senior Vice President, Legal, Regulatory and Government Affairs

DARCY TRUFYN Senior Vice President, Construction, Engineering and Project Management

BRYAN DENEVE Senior Vice President, Commercial Services

PETER ARNOLD Senior Vice President, Human Resources, and Environment, Health and Safety

ALLAN DANROTH Vice President, Planning, Business Transformation and Information Services



Corporate Information

BOARD OF DIRECTORS AND COMMITTEE MEMBERSHIP

Board of Directors	Audit Committee	Corporate Governance, Compensation and Nominating Committee	Environment, Health and Safety Committee	Keephills 3 Project Oversight Committee
Management Director Brian Vaasjo				
Richard Cruickshank		✓		✓
Albrecht Bellstedt		Chair	✓	
William Bennett	Chair		✓	
Brian Bentz			Chair	✓
Philip Lachambre	✓			✓
Brian MacNeill		✓		
Janice Rennie	✓		✓	
Don Lowry				
Hugh Bolton				
Allister McPherson	✓			✓
Robert Phillips		✓		Chair

1 All members are 'independent' and 'financially literate' within the meaning of NI 52-110.

2 Experience of the members of the Audit Committee that indicates an understanding of the accounting principles the company uses to prepare its financial statements is shown in their biographies under 'Nominees For Election to the Board of Directors' in the Management Proxy Circular.

3 All members, except Mr. Cruickshank, are independent within the meaning of NI 58-101. Mr. Cruickshank is not considered independent as he is a partner of a law firm that provides legal advice and services to the company.

4 All members are independent within the meaning of NI 58-101.

5 As Chair of the Board, Mr. Lowry is an ex-officio, non-voting member of each committee.

We plan to report on our corporate responsibility on an annual basis.



Report scope



This report includes energy production and environmental performance data from power plants for which Capital Power, or one of our subsidiaries, held the operating permit in 2010. Data from each plant represents the entire plant, not Capital Power's financial share of the operation. This includes Genesee 3, co-owned with TransAlta, for which a Capital Power entity holds the operating permit.

Data from the Joffre and Taylor Coulee facilities is not included because we do not hold the operating permits. Data from the Primary Energy Recycling Holdings (PERH) facilities is not included because PERH is not a subsidiary of Capital Power Income L.P.

One of the challenges in preparing this report was the need to synthesize data from numerous jurisdictions, some of which have different reporting requirements, methods and standards. Where

possible, information has been consolidated – for example, greenhouse gas emissions data for our facilities in Canada and the United States. In other areas, information is presented separately or from a single jurisdiction.

Greenhouse gases from our landfill gas and biomass facilities are not included in aggregate greenhouse gas emissions totals or emissions intensity calculations; they are reported separately. This approach aligns with the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (World Resources Institute and World Business Council for Sustainable Development) (2004).

REPORTING INTERVALS

We plan to report on our corporate responsibility on an annual basis.

REPORTING PERIODS

Capital Power was established effective July 1, 2009 when EPCOR sold its power generation business to Capital Power. Because Capital Power was established mid-year, some data in this report for 2009 reflects the six-month period starting July 1, 2009 and ending December 31, 2009.

Data for 2010 is for the 12-month period starting January 1, 2010 and ending December 31, 2010, and is noted accordingly, or is presented as a snapshot in time as at December 31, 2010.

PROCESS FOR DEFINING CONTENT

An extensive process for defining content, including stakeholder consultation, was developed by our predecessor company EPCOR in 2007 and 2008. In developing our 2010 report, we followed similar guidelines in determining priority topic areas and materiality.

OTHER REPORTING

Other public disclosures, in particular the Annual Report, Annual Information Form and Management Proxy Circular, include detailed content that responds to certain GRI indicators. The content is incorporated by cross-reference throughout the report, and the documents are available at www.sedar.com.

Our Canadian power plants operating above a certain emission-level threshold publicly file annual reports with Canada's National Pollutant Release Inventory. These reports are available at www.ec.gc.ca/inrp-npri.



Residents living near the Genesee Generating Station receive the bimonthly **Genesee Station Connection Newsletter**, which provides information about the facility's emissions performance and other issues related to plant and mine operations. Back issues are available at www.capitalpower.com.

We also distribute newsletters for residents living near our Kingsbridge I Wind Power facility (Ontario), and our other facilities in construction – Quality Wind Project (British Columbia), Keephills 3 (Alberta), Port Dover & Nanticoke Wind Project (Ontario) and K2 Wind Power Project (Ontario).

THIRD-PARTY ASSURANCE

PricewaterhouseCoopers LLP (PwC) was engaged to review methodologies, data collection and analysis processes used to compile data for this report. PwC's Independent Assurance Report, which identifies the specific performance indicators they reviewed, their conclusion, and a brief description of the assurance procedures, is on page 68.

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* Inside Front Cover

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AFFILIATIONS

Capital Power and its employees are members of the following organizations:

Agroforestry & Woodlot Extension Society (AWES) of Alberta	Association of Science and Engineering Technology Professionals of Alberta (ASET)	Canadian Land Reclamation Society	Edison Electric Institute	Institute of Corporate Directors	NAIT Alternative Energy Research Program
Air and Waste Management Association (USA)	Calgary Chamber of Commerce	Canadian Wind Energy Association	Electricity Consumers Resource Council	Financial Executives International	Northwest and Intermountain Power Producers Coalition
Alberta Chamber of Resources	California Cogeneration Council	Certified General Accountants Association of Alberta (CGA)	Electric Power Research Institute	Institute of Power Engineers International	Ontario Energy Association
Association of Corporate Counsel	California Manufacturing Technology Association	Certified Management Accountants of Alberta (CMA)	Electric Power Supply Association	International Association of Business Communicators (IABC)	Pemberton Chamber of Commerce
Alberta Industrial Fire Protection Association	Cambridge Chamber of Commerce	Colorado Independent Energy Association	Energy Policy Institute of Canada	International Emissions Trading Association	Project Management Institute
Arizona Competitive Power Alliance	Canadian Chamber of Commerce	Clean Air Strategic Alliance	Goderich Chamber of Commerce	Interprovincial Offset Group	Public Affairs Council
Association of General Counsel of Alberta	Canadian Clean Power Coalition	Conference Board of Canada	Gulf Coast Power Association	Industry Provincial Offsets Group	Public Policy Forum
Association of Power Producers of Ontario	Canadian Electricity Association	Construction Owners Association of Alberta	ICO2N	Kapuskasing and District Chamber of Commerce	Strathcona Industrial Association
Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA)	Canadian Information Processing Society (CIPS)	Corporate Executive Board	Independent Energy Producers Association (of California)	Law Society of Alberta	United States Combined Heat and Power Association
		Council for Information Technology Executives	Independent Power Producers of Alberta and British Columbia	Leduc and District Chamber of Commerce	Western Power Trading Forum (WPTF)
		Edmonton Chamber of Commerce	Independent Power Producers of New York	Northern Alberta Risk and Insurance Management Society	West Central Airshed Society
			Independent Power Producers Society of Alberta		Williams Lake Chamber of Commerce



GRI INDICATOR	INDICATOR TITLE AND REASON FOR NOT REPORTING	There are a number of GRI Indicators for which Capital Power does not report data. This section lists each indicator that is excluded from the report, and the reason for the exclusion.			
EU3	Number of customer accounts Capital Power has no retail power business and, therefore, no retail customer accounts.	EU10	Planned capacity against projected electricity demand over long term Capital Power is an independent producer and operates in markets where it does not have overall market responsibility for managing short- or long-term electricity availability or reliability.	EN30	Total environmental protection expenditures Capital Power reports on specific projects, including front-end engineering design for near-zero emission power generation. However, no total dollar value is reported for research and development activities as this data is not aggregated within the company.
EN4	Indirect energy consumption Capital Power does not track this information, and emissions from indirect energy consumption are not material compared to direct emissions from operations.	EU12	Transmission and distribution losses Capital Power does not operate transmission and distribution lines.	LA10	Average hours of training per year per employee Capital Power does not currently collect this data. A Learning Management module is planned for implementation in late 2012/ early 2013.
EU4	Length of transmission lines Capital Power does not operate transmission and distribution lines.	EN17	Other greenhouse gas emissions by weight Not material.	LA12	Percentage of employees receiving regular performance and career development reviews Managers are responsible for providing regular (at least annual) performance reviews for their employees; however, Capital Power's systems do not currently collect aggregated data on the completion of reviews. A new performance management system is planned for implementation in late 2011.
EU6	Management approach to ensure short- and long-term electricity availability and reliability Capital Power is an independent producer and operates in markets where it does not have overall market responsibility for managing short- or long-term electricity availability or reliability.	EU23	Programs to improve or maintain access to electricity and customer support Capital Power has no retail power business and, therefore, no retail customer accounts.	PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement As a power producer, Capital Power does not have products and services.
EU7	Demand-side management programs Capital Power has no retail power business and, therefore, no customer-facing demand management programs.	EU24	Practices to address barriers to accessing and safely using electricity and customer support services Capital Power has no retail business and, therefore, no retail customer accounts.		
EU9	Provisions for decommissioning nuclear power sites Not applicable. Capital Power does not operate or own any nuclear power generation.	EN27	Percentage of products sold and package materials reclaimed. Not applicable.		
		EN29	Significant environmental impact of transporting products Capital Power does not currently collect this data.		

Independent assurance report

To the Board of Directors and Management of Capital Power Corporation ("Capital Power"):

We have reviewed selected quantitative performance indicators (the "Subject Matter") presented in Capital Power's Corporate Responsibility Report (the "Report") for the year ended December 31, 2010. We did not review all information included in the Report.

SUBJECT MATTER

We reviewed the selected quantitative indicators listed below [relevant GRI reference]:

- Greenhouse gas emissions and intensity [EN16];
- Reportable environmental incidents [EN23];
- Total recordable injury frequency, employees [LA7];
- Employee training re company ethics policy (percentage of employees trained) [HR3];
- Employee turnover rate and reason by age group, gender and reason [LA2]; and
- Policies practices and spending on locally based suppliers for significant operations [EC6].

We also reviewed Capital Power's self-declaration of level of reporting achieved under the Global Reporting Initiatives guidelines.

The selected quantitative performance indicators were chosen by Capital Power primarily on the basis of perceived external stakeholder interest. We did not review the narrative sections of the Report, except where they incorporated the Subject Matter.

RESPONSIBILITIES

Capital Power management is responsible for collection and presentation of the Subject Matter set out in the Report. Our responsibility is to express

a conclusion, based on our assurance procedures, as to whether anything has come to our attention to suggest that the Subject Matter is not presented fairly in accordance with the relevant criteria.

METHODOLOGY AND ASSURANCE PROCEDURES

We conducted our work in accordance with the International Standard on Assurance Engagements (ISAE) 3000, "Assurance Engagements other than Audits or Reviews of Historical Financial Information", issued by the International Federation of Accountants. As such, we planned and performed our work in order to provide limited assurance with respect to the Subject Matter. We obtained and evaluated evidence using a variety of procedures including:

- Interviewing relevant Capital Power management and staff responsible for data collection and reporting;
- Obtaining an understanding of the management systems, processes, and controls used to generate, aggregate and report the data;
- Reviewing relevant management documents, consultant reports, and records on a sample basis;
- Testing and re-calculating quantitative information related to the selected performance indicators on a sample basis;

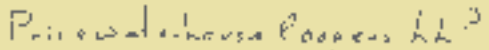
- Assessing the information collected for completeness, accuracy, adequacy and consistency; and
- Reviewing and discussing the final version of the Report with Capital Power management to confirm that it reflected our findings.

Our evidence-gathering procedures were more limited than required for a reasonable assurance engagement and, consequently, we do not express an audit opinion on the Subject Matter.

We carried out our work on the selected performance indicators at Capital Power's head office in Edmonton, Alberta. Our assurance criteria comprised the Global Reporting Initiative Sustainability Reporting Guidelines (2006), industry standards, and Capital Power internal management definitions as disclosed in the Report, informed by relevant regulations. Our assurance team included individuals with environmental, health and safety, social, economics and assurance experience.

CONCLUSION

Based on our work as described in this report, nothing has come to our attention that causes us to believe that the Subject Matter is not, in all material respects, presented fairly in accordance with the relevant criteria.



PRICEWATERHOUSECOOPERS LLP
Calgary, Canada August 08, 2011

Forward-looking information

Certain information in this Corporate Responsibility Report is forward-looking within the meaning of Canadian securities laws as it is related to anticipated financial and operating performance, events or strategies. When used in this context, words such as will, anticipate, believe, plan, intend, target, and expect, or similar words suggest future outcomes.

In particular, forward-looking information and statements include information and statements with respect to: (i) Capital Power's plans to grow to 10,000 MW of owned and operated generation capacity by 2020; (ii) Capital Power's targets for 2011, including targets related to committed capital for acquisitions and developments, plant availability, plant maintenance and capital expenditures, and delivering total shareholder returns greater than the median of its peer group; (iii) total cost and expected commercial operation date of Keephills 3; (iv) costs and commercial operation dates for the Quality Wind and Port Dover & Nanticoke Wind projects; (v) expectations regarding the outcome of human resources and performance management programs, including their ability to improve the efficiency and effectiveness of business operations; (vi) expectations regarding the outcome of health and safety programs, including their ability to achieve continual improvement, ongoing safety awareness; and a zero-injury safety culture; (vii) expectations that capital projects at the California and North Carolina facilities will result in continued improvements in operating efficiencies and reductions in environmental emissions; (viii) expectations regarding the timing of finalization of the North Saskatchewan Watershed Alliance's Integrated Watershed Management Plan; (ix) expectations regarding the ability of existing and proposed Capital Power facilities to generate power and the generation capacity of those existing and proposed facilities, including expectations regarding the Quality Wind and Port Dover & Nanticoke Wind projects; (x) expectations regarding the proposed extension of the Genesee Mine permit area, the timing of completion of negotiations and the timing of filing the application in respect of the mine extension; (xi) Capital Power's corporate strategy, including with respect to becoming a competitively priced power producer, access to low-cost capital, managing risk, ensuring safety and becoming a desirable employer; (xii) expectations regarding the proposed carbon capture and storage partnership (Project Pioneer) in relation to the Keephills 3 site, including expectations regarding the amount of greenhouse gases captured by, and reductions or improvements in environmental emissions as a consequence of, Project Pioneer; (xiii) expectations regarding Capital Power's ability to receive or benefit from government funding, including Government of Canada funding from the Wind Power Production Incentive Program and from the Clean Energy Fund, and Government of Alberta funding from the Carbon Capture and Storage Fund; (xiv) expectations regarding the improvement in and

reduction of current and future power plants' environmental emission levels and ability to capture future emissions, including through the use of new equipment and technologies; (xv) expectations regarding the sale of fly ash from Genesee 3 in 2011, and the sale of fly ash from all Genesee units in 2012; (xvi) expectations regarding the timing, content, and implementation of new environmental regulations, the expected impact of environmental regulations on Capital Power's operations, and the anticipated costs of complying with such regulations; and (xvii) expectations regarding public consultations and the timing thereof, including public consultations in respect of the Port Dover & Nanticoke Project and Genesee Mine; and (xviii) Capital Power maintaining an investment-grade credit rating.

These statements are based on certain assumptions and analysis made by Capital Power in light of its experience and perception of historical trends, current conditions and expected future developments and other factors it believes are appropriate. The material factors and assumptions used to develop these forward-looking statements include, but are not limited to: (i) the operation of Capital Power's facilities; (ii) power plant availability, including Sundance which is subject to an acquired PPA; (iii) Capital Power's financial position and credit facilities and sources of funding; (iv) Capital Power's assessment of commodity and power markets, including power prices for 2011; (v) Capital Power's assessment of the markets and regulatory environments in which it operates; (vi) weather; (vii) availability and cost of labour and management resources; (viii) performance of contractors and suppliers; (ix) availability and cost of financing; (x) foreign exchange rates; (xi) management's analysis of applicable tax legislation; (xii) that currently applicable and proposed tax laws will not change and will be implemented; (xiii) currently applicable and proposed environmental regulations will be implemented, including regulations related to coal-fired electrical utilities; (xiv) counterparties will perform their obligations; (xv) renewal and terms of power purchase arrangements; (xvi) ability to successfully integrate and realize benefits of its acquisitions, including the acquisition of the North Carolina assets from CPILP (the "Acquisition") and the acquisition of all of the Halkirk I Wind Project; (xvii) ability to implement strategic initiatives which will yield the expected benefits; (xviii) ability to obtain necessary regulatory approvals for development projects; (xix) Capital Power's assessment of capital markets, common share ownership distribution, and ability to complete future share and debt offerings; (xx) locations of projects and the areas of which they will be developed, including the availability and use of certain optioned lands; (xxi) costs of construction and development; (xxii) current risk management strategies, including hedges will be in place; (xxiii) ability to manage the transition to International Financial Reporting Standards; and (xxiv) the receipt

of all required regulatory approvals and the satisfaction of all other conditions precedent to the closing of the divestiture of Capital Power's interest in CPILP (the "Sale") and the Acquisition.

Whether actual results, performance or achievements will conform to Capital Power's expectations and predictions is subject to a number of known and unknown risks and uncertainties, which could cause actual results and experience to differ materially from Capital Power's expectations. Such risks and uncertainties include, but are not limited to, risks relating to: (i) operation of Capital Power's facilities; (ii) power plant availability and performance, including unplanned plant outages at facilities of other market participants; (iii) unanticipated maintenance and other expenditures; (iv) availability and price of energy commodities; (v) electricity load settlement; (vi) regulatory and government decisions including changes to environmental, financial reporting and tax legislation; (vii) weather and economic conditions; (viii) competitive pressures; (ix) construction; (x) availability and cost of financing and changes to Capital Power's credit rating; (xi) foreign exchange rates; (xii) availability and cost of labour, equipment and management resources; (xiii) performance of counterparties, partners, contractors and suppliers in fulfilling their obligations to Capital Power; (xiv) developments in the North American capital markets; (xv) compliance with financial covenants; (xvi) ability to successfully realize the benefits of acquisitions and investments; (xvii) the tax attributes of and implications of any acquisitions; (xviii) ability to secure new contracts and terms of such contracts; (xix) the failure to receive any required regulatory approvals in connection with the Sale or the Acquisition or the failure to satisfy any other condition to the Sale or the Acquisition; and (xx) the failure of Capital Power to realize expected benefits from the Sale and the Acquisition. If any such risks occur, they could materially adversely affect Capital Power's business, financial condition or results of operations. In that case, the trading price of Capital Power's securities could decline, perhaps materially.

Readers are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date made. Actual results could differ materially from the plans, expectations, estimates or intentions expressed in the forward-looking statements. Forward-looking statements are provided for the purpose of providing information about management's current expectations, and plans relating to the future. Readers are cautioned that such information may not be appropriate for other purposes. Capital Power does not undertake or accept any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements to reflect any change in Capital Power's expectations or any change in events, conditions or circumstances on which any such statement is based, except as required by law.



Glossary, units of measurement and abbreviations

Some terms are defined in the context of Capital Power's operations and are commonly used and accepted by industry. Other terms are defined in accordance with Global Reporting Initiative (GRI) documentation.

Biomass fuel Renewable organic materials, such as wood, used as a source of fuel or energy in an industrial operation, such as a biomass-fuelled power plant. Power plant biomass fuel may come from sources such as residual forest matter and sawmill waste.

Carbon dioxide Abbreviated as CO₂. In the atmosphere, a greenhouse gas that affects the Earth's temperature.

Carbon dioxide equivalent (also CO₂E or CO₂ equivalent) Used to compare emissions from various greenhouse gases based on their global warming potential (GWP). The CO₂ equivalent for a gas is derived by multiplying the tonnes of the gas by the associated GWP. (Global Reporting Initiative Sustainability Reporting Guidelines 2006)

Combined-cycle (natural gas) A combined-cycle power plant generates electricity from one or more gas and steam turbines. A turbine uses natural gas

as fuel to generate electricity. The excess heat from combustion of the natural gas is used to generate steam, which is used to power a steam turbine.

Combined heat and power (or cogeneration) Combined heat and power or cogeneration is the simultaneous production of electricity (power) and heat (thermal energy) from a single fuel source, such as natural gas, biomass, biogas, coal, waste heat, or oil.

Emissions intensity The ratio of mass emissions per unit of net output or production, such as tonnes per megawatt hour (MWh).

Gross production The total amount of electricity generated by a power plant, including the amount consumed by station services.

Lost time injury An injury/illness resulting in lost days beyond the date of injury as a direct result of an occupational injury/illness incident. (Source: Canadian Electrical Association.)

Lost time injury severity The number of calendar days that the employee is unable to work beyond the day of injury/illness. Lost time ends when the employee is deemed fit to work full time by a physician or health-care professional, or goes on restricted work, or after 180 calendar days.

Megalitres (ML) One million litres, or 1,000 cubic metres.

Megawatt (MW) A unit of power equal to 1 million watts used to represent the productive capacity of a power plant.

Megawatt hour (MWh) One megawatt hour represents one hour of electricity production (or consumption) at a constant rate of 1 MW.

Net production Electricity output (megawatt hours) to the transmission grid from the power plant. (Global Reporting Initiative Sustainability Reporting Guidelines 2006)

Recordable injury Any occupational injury/illness that results in a fatality, lost time injury, medical treatment injury or other injury/illness that involves restricted work or significant occupational injury/illness or loss of consciousness. (Source: Canadian Electrical Association.)

Renewable energy Renewable energy is derived from natural processes that are replenished constantly. This includes electricity and heat generated from solar, wind, ocean, hydropower, biomass, geothermal resources, biofuels, and hydrogen derived from renewable resources. (Indicators Protocol Set: Environment; Global Reporting Initiative, 2009)

Restricted work When an employee, due to a work-related injury/illness, is medically determined to be unable to perform one or more routine functions or unable to work the normal time period of their pre-injury/illness work day, he or she is working in a 'restricted capacity' (Source: Canadian Electrical Association.)

Simple cycle (natural gas) A simple cycle power plant uses electricity-generating turbines fuelled by natural gas. Simple cycle turbines quickly achieve full generation capacity to meet peak demands for electricity.

Stakeholder Stakeholders are defined broadly as those groups or individuals: (a) that can reasonably be expected to be significantly affected by the organization's activities, products, and/or services; or (b) whose actions can reasonably be expected to affect the ability of the organization to successfully implement its strategies and achieve its objectives. (Global Reporting Initiative Sustainability Reporting Guidelines 2006)

Station services All of the equipment and operations at a power plant that consume electricity. $\text{Gross production (MWh)} - \text{station services energy use (MWh)} = \text{net production (MWh)}$.

Subcritical coal Pulverized coal that is burned in conventional or vintage plants. The coal is pulverized into fine powder before it burns in suspension inside a furnace under pressure.

Supercritical coal Pulverized coal that is burned in a supercritical boiler. Higher temperatures and steam pressure together with a high-efficiency steam turbine create a more efficient process for converting thermal energy into electricity. The process uses less coal per MWh of electrical energy than the conventional subcritical process, thereby reducing emissions. The coal burns in suspension inside a furnace at high pressure.

Total recordable injury frequency The number of recordable injuries experienced by an employer in a specified time period. The frequency is calculated by multiplying the number of recordable injuries by 200,000 hours (200,000 hours is a widely accepted industry standard base and equals 100 employees working 40 hours per week for 50 weeks per year) and then dividing that number by the hours worked (exposure hours).

Waste heat recovery Some facilities take waste heat from their own process or from another facility. This waste heat would otherwise be emitted to the atmosphere. The facilities use the waste heat to produce electricity or steam.

GLOBAL REPORTING INITIATIVE (GRI) ALIGNMENT

This report follows the guidelines defined in the Global Reporting Initiative, an internationally recognized standard for corporate responsibility reporting. The GRI guidelines set out the principles and indicators that organizations can use to measure and report their environmental, economic and social performance. See page 63 for an index of our reporting against the general GRI guidelines and the GRI Electric Utilities Sector Supplement, Version 3.0.



A+ reporting level We believe we have achieved an 'A+' level of reporting under the GRI guidelines. There are three grades, with eligibility based on the comprehensiveness of the report (A, B, C) and a '+' designation, indicating that the report has received third-party assurance. We make this self-declaration based on the GRI requirements to meet the 'A+' level. PricewaterhouseCoopers LLP has checked our self-declaration and agrees with our assessment. See the 'Exclusions' section on page 67 for an explanation about why we are not able to provide certain data.

ENVIRONMENT PC100 FSC CERTIFIED PAPER

Environmental Benefits Statement

This report is printed on Environment PC100 FSC® Certified Paper – Forest Stewardship Council® certified paper containing 100% post-consumer waste fibres that is totally chlorine free. By using this environmentally friendly paper in a print run of 600 copies, Capital Power saved the following resources:



28

TREES PRESERVED FOR THE FUTURE



82 lbs

WATER-BORNE WASTE NOT CREATED



12,030 Gal

WASTE WATER FLOW SAVED



1,331 lbs

SOLID WASTE NOT GENERATED



2,621 lbs

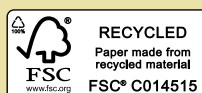
NET GREENHOUSE GASES PREVENTED



20,060,000

BRITISH THERMAL UNITS OF ENERGY NOT CONSUMED

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CAPITAL POWER CORPORATION

10065 Jasper Avenue
Edmonton, AB, Canada T5J 3B1

**Capital Power's Edmonton offices are
moving in Fall 2011. Our new address will be:**

Suite 1200, 10423 – 101 Street NW
Edmonton, AB, Canada T5H 0E9

capitalpower.com

