

# 2011

Corporate  
Responsibility  
Report

Capital  
Power 



} ON TRACK...



**OUR COMPANY**

Established in July 2009, Capital Power (TSX: CPX) is a growth-oriented North American power producer headquartered in Edmonton, Alberta. We develop, acquire, operate, and optimize power generation from coal/solid fuels, natural gas, and wind.

As of December 31, 2011, we owned more than 3,300 megawatts (MW) of power generation capacity at 16 facilities in Canada and the United States (U.S.) and, rights to 371 MW of production were held through our interest in the Sundance Power Purchase Arrangement.

An additional 487 MW of owned wind generation capacity is under construction or in advanced development in Alberta, British Columbia, and Ontario.

Our power generation operations and assets are owned by Capital Power L.P. (CPLP), a subsidiary of Capital Power.



3 2011 HIGHLIGHTS

6 PRESIDENT'S MESSAGE

9 PLACES

39 PERFORMANCE

63 PEOPLE

78 GOVERNANCE

80 CORPORATE INFORMATION

81 REPORT SCOPE

82 GRI INDEX

84 EXCLUSIONS

85 AFFILIATIONS

86 INDEPENDENT ASSURANCE STATEMENT

87 GLOSSARY

88 FORWARD-LOOKING INFORMATION



A person wearing a blue long-sleeved shirt, blue jeans, and brown work boots is walking on a rocky path. The path is surrounded by tall green grass and yellow wildflowers. The person is carrying a radio on their belt.

### **our vision:**

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

### **our mission:**

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



### 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](http://www.globalreporting.org).



### ADDITIONAL INFORMATION

This icon appears next to topics throughout the printed report to indicate that further information is available online at [www.capitalpower.com](http://www.capitalpower.com).



### QUESTIONS OR COMMENTS



Feedback and questions are welcomed.  
Contact Capital Power at: [info@capitalpower.com](mailto:info@capitalpower.com).



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



## HIGHLIGHTS



### STRATEGY

We demonstrated financial strength and stability, as earnings and cash flow met expectations. The achievement of capital acquisition and development targets enhanced shareholder value, and operational excellence was achieved as measured by improved employee safety and plant availability.



### ORGANIZATIONAL DEVELOPMENTS

#### DIVESTITURES

We divested Capital Power Income L.P. and announced plans to sell our three small hydro facilities.

#### ADDITIONS

Three natural gas facilities in the New England region of the United States and two mixed-fuel facilities in North Carolina were acquired.

We commissioned Keephills 3\*, a state-of-the-art coal-powered facility co-owned with TransAlta.

#### GROWTH

We committed \$1.4 billion to the development of four wind projects and began construction on two of them: Quality Wind in northeastern British Columbia and Halkirk in east-central Alberta.



### CORPORATE GOVERNANCE

The Board approved a "Say on Pay" policy and refinements to executive compensation, which were recommended to the 2012 Annual General Meeting.

A search committee was struck to ensure both continuity and continuous renewal by identifying two new Director nominees.



### ENVIRONMENTAL IMPACTS

More than 70% of mercury emissions from the Genesee facility were captured, and 63% less mercury was emitted by our facilities overall in 2011.



### ECONOMIC PERFORMANCE

We paid \$178 million in dividends and distributions to our equity investors and raised \$1,073 million from the issuance of long-term debt and common shares. Our strong performance was reflected in improved cash flow per share and stable normalized earnings per share results.



### PEOPLE PRACTICES

Our custom-designed iLead Leadership Development Program was launched to help develop our people.

Our focus on safety improved our results significantly – reducing our total recordable injury frequency by 50% in a single year.

Our employee count was lower at the end of 2011, due to the divestiture of CPILP.



### COMMUNITY

Approximately \$1.2 million was provided to non-profit organizations that make our communities better.

We continued consultation with landowners and other stakeholders for our wind projects and the Genesee Mine Extension proposal.

\* 50/50 joint venture with TransAlta Corporation; Capital Power built the facility and TransAlta operates it.





We committed  
\$1.4 billion to  
wind power.



# We value transparency and balanced reporting.

## ABOUT THIS REPORT

This report provides a detailed overview of Capital Power in 2011, including our successes and challenges. Building on our 2009 and 2010 reports, we aim to be clear and concise in providing accurate and balanced information about our people, facilities and performance (including emissions), and our contributions to the communities where we do business. All dollar figures are in Canadian funds.

The scope of our operations changed significantly in 2011. We divested our interests in Capital Power Income L.P. (CPILP), and facilities were acquired in the United States.

When comparing 2011 performance to prior years, readers are cautioned that 2010 and 2009 data in this report may include CPILP facilities. See Report Scope on page 81 for details.

## "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. Ernst & Young has checked our self-declaration and agrees with our assessment. See the Exclusions section on page 84 for an explanation about why we are not able to provide certain data.



PEOPLE  
PLACES  
PERFORMANCE





MESSAGE FROM  
PRESIDENT AND CEO, BRIAN VAASJO

# Commitment, action, results.



Developing an A+ corporate responsibility report three years in a row takes sustained commitment, deliberate action, and teamwork across the entire corporation.

Our 2011 corporate responsibility report provides numerous examples of the actions we take and the way we behave, every day – in our community, in our facilities, at our offices, and on our construction sites.

We aim to report our results in a manner that presents a holistic view of our business and shows the linkages between our business strategy and our corporate responsibility program.

We strive to make this report meaningful and relevant to all our stakeholders by addressing a wide range of topic areas.

## SHARED VALUES

Achieving the highest level of the Global Reporting Initiative's rating system reflects another year of aiming high, articulating strategy, and executing on plans that are driven by shared values and ethical standards. We are always conscious of our promise to be transparent and accountable.

Keeping our commitment to producing an accurate annual record of how we've performed and where we fell short drives us to work even harder to achieve our vision of being one of North America's most respected, reliable, and competitive power generators.

## EMPLOYEE SAFETY RECORD IMPROVES


The health and safety of our employees and the public is paramount.

In 2011, our increased focus on health and safety produced improved results for Total Recordable Injury/Illness Frequency compared to the previous year. However, one injury is one too many, and we are disappointed and concerned whenever an employee is injured seriously enough that they require medical attention. There were 10 such injuries this past year.

On a positive note, safety milestones were achieved at four of our facilities and one construction site.

Although we were pleased to achieve these milestones, we will not rest on our record as we strive for continuous improvement in employee health and safety. Our goal is year-over-year progress, with zero injuries by 2015.





We aim to report our results in a manner that presents a holistic view of our business and shows the linkages between our business strategy and our corporate responsibility program.

#### **A GROWING NUMBER OF WIND PROJECTS**

With four wind projects in construction or advanced development, the percentage of wind power in our portfolio is increasing.

Key to the success of these projects is the rigorous public consultation we undertake and our actions to manage any environmental impacts.

#### **MAKING GREAT COMMUNITIES EVEN BETTER**

Many of our employees across North America are active in their communities. We're helping make their 'good turns' work even harder through our EmPowering Communities program, which provides corporate funding to the causes our people give their time to and care about.

We actively encourage volunteerism, and we support our employees in their work to help strengthen the communities where our people live and work.

#### **PASSIONATE ABOUT OUR BUSINESS**

The Oxford Dictionary defines passion as "an intense desire or enthusiasm for something." At Capital Power, that "something" is everything we do as a company.

Whether it's safety, community work, employee engagement, land reclamation, shareholder communication, business development, construction of new facilities, or any other activity we undertake, we are a team of people passionate about our business. And this includes being passionate about our responsibilities as a corporate citizen.

Our responsible behaviour in 2011 was recently lauded by Corporate Knights magazine, which in 2012 named Capital Power as one of Canada's Top 50 Corporate Citizens for the second consecutive year. This inspires us to work even harder.

In 2012, we will mark our three-year anniversary as a publicly traded company. We remain committed to earning and sustaining your trust and hope this report serves its purpose of helping you to judge us – not just by what we say we will do, but by our actions and behaviour on a consistent basis for many years to come.



**BRIAN VAASJO** PRESIDENT AND CEO







**We protect the  
places where  
we live and work.**





Our track record of operational excellence and reliability is the result of diligence, skill, and experience, along with a strict adherence to robust safety policies and plant maintenance practices.

# We are sharpening our focus and delivering on strategy.

Our modern and well-maintained facilities comprise a young fleet, with an average plant age of 12 years.

Three natural-gas-powered facilities in New England and two solid-fuel facilities in North Carolina joined our Capital Power family as we established a strong position in those two key markets. Our people worked as a team to ensure the seamless integration of these important assets.



We added capacity to our Alberta portfolio with the completion of Keephills 3, the most technologically advanced coal-powered generation plant in North America.

The divestiture of CPILP in 2011 streamlined our operations and tightened our focus on specific fuel technologies. Our 16 facilities in key regions across North America safely and efficiently generate power from natural gas, wind, coal and solid fuels.

Our track record of operational excellence and reliability is the result of diligence, skill, and experience, along with a strict adherence to robust safety policies and plant maintenance practices. In 2011, we maintained a high operating availability of 92%, and some of our facilities achieved 100% availability.



We added capacity to our Alberta portfolio with the completion of Keephills 3, the most technologically advanced coal-powered generation plant in North America.



# Our modern fleet of well-maintained facilities

(As at December 31, 2011)

**HYDRO**

**WIND**

**GAS**

**COAL/SOLID FUELS**

**12**

AN AVERAGE PLANT AGE OF 12 YEARS

1 50/50 joint venture with TransAlta Corporation. Genesee 3 operated by Capital Power Corporation and Keephills 3 operated by TransAlta Corporation.

2 Jointly owned with ATCO Power and Nova Chemicals, operated by ATCO.

3 Jointly owned with Samsung Renewal Energy Inc. and Pattern Renewal Holdings Canada ULC.

## BRITISH COLUMBIA

- 1 Brown Lake
- 2 Island Generation
- 3 Miller Creek
- 4 Quality Wind (in construction)

## ALBERTA

- 5 Keephills 3<sup>1</sup>
- 6 Genesee 3<sup>1</sup>
- 7 Genesee 1 & 2
- 8 Clover Bar Energy Centre
- 9 Clover Bar Landfill Gas
- 10 Joffre<sup>2</sup>
- 11 Halkirk Wind Project (in construction)

## ONTARIO

- 12 Kingsbridge I
- 13 K2 Wind Ontario (in development)<sup>3</sup>
- 14 Port Dover & Nanticoke (in development)

## MAINE

- 15 Rumford

## RHODE ISLAND


- 16 Tiverton

## CONNECTICUT


- 17 Bridgeport

## NORTH CAROLINA

- 18 Roxboro
- 19 Southport

 Contracted Facilities

 Commercial/Merchant Facilities

 Under construction/in development





## BUILDING OUR GENERATION PORTFOLIO

In 2011, five\* new facilities were acquired and integrated into Capital Power.

Long before an acquisition is complete, a cross-functional team works together to develop and execute an integration plan. The team includes representatives from Operations, Finance, Legal, Information Services, Human Resources, Environment, Commodities Portfolio Management, and Health and Safety.

We use a two-phased approach when welcoming new people and facilities to our company.

- 1 Phase one focuses on pre-assessments – finance, environmental, and insurance.
- 2 Phase two focuses on the transition of systems and technologies and the integration of people and processes.

\* Excludes Keephills 3 because we are not the operator of this facility, which was built in 2011.



IN 2011, FIVE NEW FACILITIES WERE ACQUIRED AND INTEGRATED INTO CAPITAL POWER

## THE POWER INDUSTRY

### PRODUCING AND SELLING POWER

Our facilities in different regions operate under different rules, regulations, policies and governments. One of our business strategies is to establish networked hubs of similar plants operating in the same region. Our competitive advantage is to know and understand how to operate effectively and efficiently in specific regions within a complex industry.

In general, there are different divisions of responsibilities in the power industry. These include:

- System operators (such as Alberta Electric System Operator) – responsible for the safe, reliable and economic planning and operation of the electrical system;
- Regulators (such as Alberta Utilities Commission) – who review and approve or decline electricity projects;
- Policy-makers (such as the Department of Energy); and
- Independent power producers (such as Capital Power).

As a power producer, our plants sell power under two main types of commercial arrangements:

**Contracted** These plants have legal contracts between an electricity generator (e.g. Capital Power) and a power purchaser (i.e., At our Genesee facility, the Balancing Pool of Alberta purchases the output from Genesee units G1 and G2 through a Power Purchase Arrangement or PPA). The power purchaser acquires energy, and sometimes capacity and/or ancillary services, from the electricity generator.

**Merchant** These plants sell all or a portion of their output in a competitive wholesale market, without the benefit of long-term contracts. Genesee 3 is an example of a merchant facility.

For detailed information on our commercial arrangements for each of our contracted and merchant facilities, and the management of our trading positions, see pages 11 to 21 of the 2011

Annual Information Form at [www.capitalpower.com](http://www.capitalpower.com).







## WIND PROJECTS IN DEVELOPMENT

Facility	Owned Capacity	Expected Commercial Operation
Quality Wind	142 MW	Q4, 2012
Halkirk Wind	150 MW	Q4, 2012
K2 Wind Ontario	90 MW	2014
Port Dover & Nanticoke Wind	105 MW	Q4, 2013

## 2011 FLEET ADDITIONS



Facility	Fuel Source	Owned Capacity
Bridgeport	Combined-cycle natural gas	520 MW
Rumford	Combined-cycle natural gas	265 MW
Tiverton	Combined-cycle natural gas	265 MW
Keephills 3	Supercritical Coal	247.5 MW
Roxboro	Solid Fuels	46 MW
Southport	Solid Fuels	88 MW

## CAPITAL POWER NET \* GENERATION (MWH)

### Canadian Net Generation

2009	12,395,000
2010	12,711,000
2011	10,531,000

### United States Net Generation

2009	5,874,000
2010	5,326,000
2011	5,409,000

\* The 2010 and 2009 data include CPILP facilities. 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. is the predecessor for CPILP. No production from CPILP facilities is included in 2011, because the facilities were divested during 2011. Production statistics may differ from other published statistics due to differences in the scope of reporting (see page 81).



# EVOLUTION OF OUR FLEET

In 2011, we continued to deliver on strategy by streamlining the technology at our facilities and focusing primarily on three major fuel sources – natural gas, coal/solid fuels and wind. With the divestiture of CPILP, the number of facilities is now 16, down from 31, with a higher bias towards natural gas as a fuel source compared to coal. We acquired three natural gas plants in the New England region of the United States and now own 100% of our two solid fuel facilities in North Carolina, compared to a 30% ownership in 2010 under CPILP.

With four wind projects in advanced development or construction, the wind-power mix in our portfolio will increase to 14% (from 1%) and add 487 megawatts of renewable energy by 2014.

# 14%

THE WIND-POWER MIX IN OUR PORTFOLIO  
WILL INCREASE TO 14% BY 2014

## FUEL SOURCES



**Coal consumption declined by 0.8%, mainly due to the unplanned outage at the Genesee 3 facility in Alberta.**



**Natural gas consumption decreased by 5% due to the CPILP divestiture and decreased power generation at the Island Generation facility in British Columbia.**



**Biomass consumption decreased by 65% due to the divestiture of the CPILP facilities in Williams Lake, British Columbia and Calstock, Ontario.**



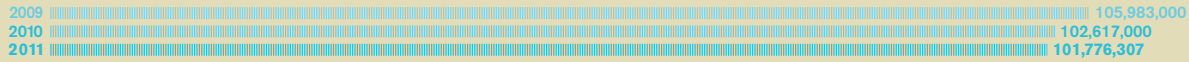
**Tire-derived fuel consumption increased by 228% due to higher availability at our two North Carolina facilities. Higher availability gave us the opportunity to optimize our fuel mix.**



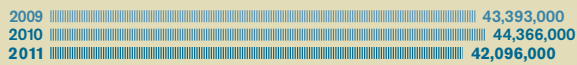
## DIRECT ENERGY CONSUMPTION (Gigajoules)



### COAL



### NATURAL GAS



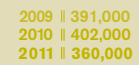
### BIOMASS



### TIRE-DERIVED FUEL



### LANDFILL GAS



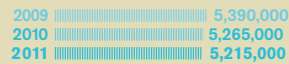
## MATERIALS USED



### NATURAL GAS (gigajoules)



### COAL (tonnes)



### BIOMASS (tonnes)



### LANDFILL GAS (gigajoules)



### TIRE-DERIVED FUEL (tonnes)



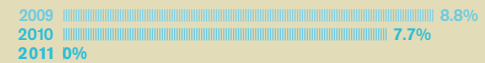
Capital Power no longer owns facilities that produce waste heat.

## ENERGY SAVED DUE TO CONSERVATION AND EFFICIENCY

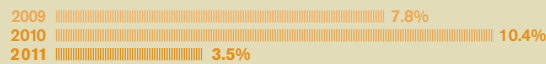
### GENERATION FROM WASTE HEAT - % MWh (recycled)



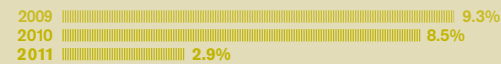
### GENERATION FROM WASTE HEAT - % CAPACITY (recycled)



### GENERATION FROM RENEWABLE - % MWh



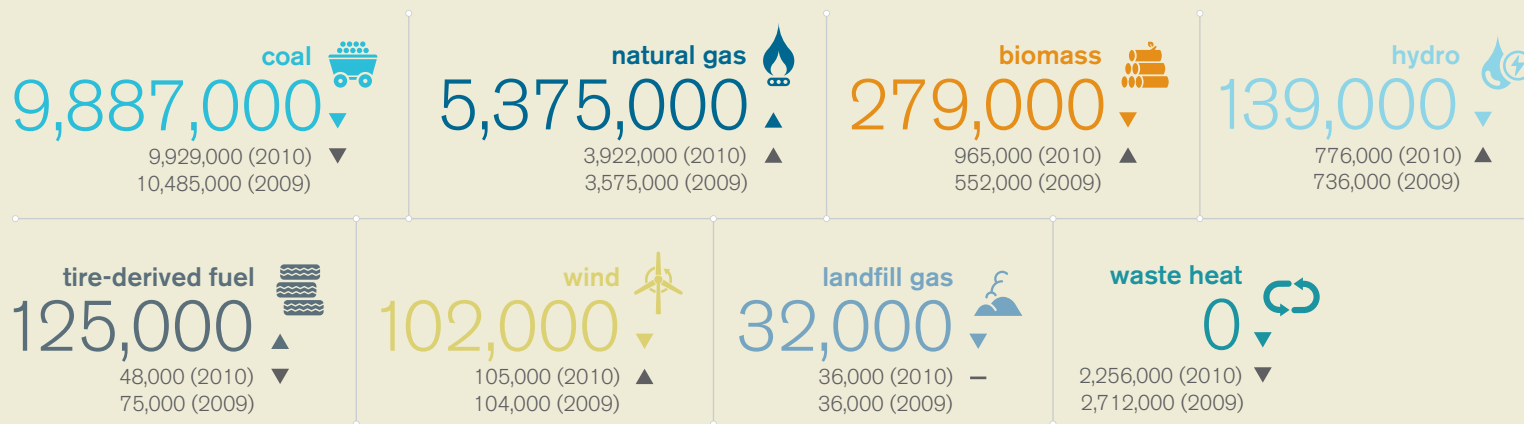
### GENERATION FROM RENEWABLE - % CAPACITY



2009 and 2010 data include CPILP facilities which were divested and are not included in the 2011 data.



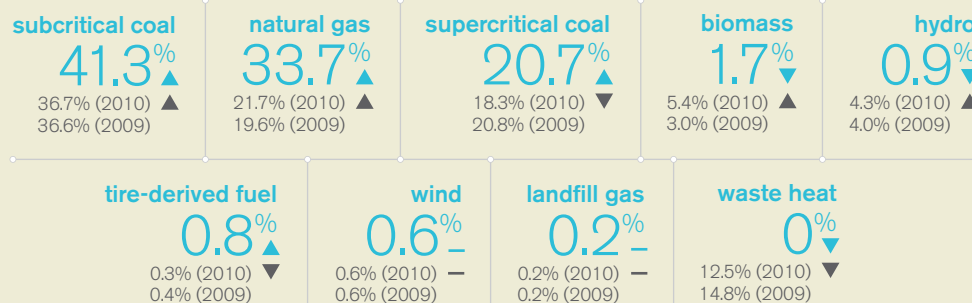
## NET PRODUCTION BY ENERGY SOURCE (MWh)



### NET GENERATION BY FUEL TYPE (MWh)

Production (MWh) includes both electricity and exported steam. Steam production was converted from gigajoules (GJ) to MWh using a conversion factor of 3.6 GJ/MWh to allow aggregation. Production statistics differ from other published statistics due to differences in reporting scope.

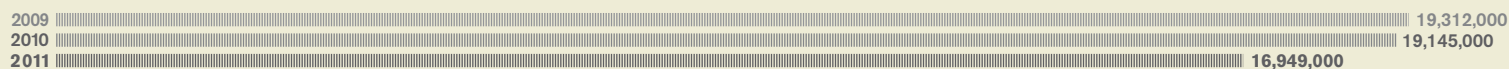
For information on the production capacity, energy source, location, and ownership interests for Capital Power's 16 facilities, please see the tables provided in Capital Power's 2011 Annual Information Form, and the 2011 Annual Report at [www.capitalpower.com](http://www.capitalpower.com).



### NET PRODUCTION



### GROSS PRODUCTION



### ELECTRICITY CONSUMED BY STATION SERVICES (MWh)



The conversion of steam (GJ) to an electricity equivalent (MWh equivalent) assumes several ideal conditions, which results in an approximate number. Production statistics differ from other published statistics due to differences in reporting scope.





We own more than  
3,300 megawatts of  
power generation.



## PASSIONATE ABOUT SAFETY

Zero injuries by 2015 is our target, and we're creating a culture in which safety is top of mind for every employee. All contractors doing work for Capital Power must also comply with our safety policies and procedures.



"One of our core values is to be passionate about safety. The safety of our people, our contractors and anybody associated with our facilities is a major focus, and we've had an increasingly positive safety record since our Initial Public Offering. We're striving for zero injuries."

Brian Vaasjo, President and CEO

# We are creating a culture where safety is our top priority.

We have robust safety programs and procedures, and we set and continuously monitor safety targets. Steps are taken to ensure that equipment is in safe working order, that employees receive the necessary safety training, and that they have the right tools and protective equipment to complete their work in a safe manner.

The process of safe work planning facilitates 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.

Our approach to safety includes:

- Establishing clear goals, and monitoring performance;
- Promotion of a zero-injury culture and healthy lifestyles;
- Proactive identification and management of environment, health and safety-related risks within operations, maintenance and construction activities;

- Strict compliance with all applicable laws and regulatory requirements;
- Continuous review and improvement of the policy; and
- The alignment of contractors with company policy.

## SAFETY STANDOUTS

**Our Tiverton facility in Rhode Island recently achieved a 10-year record of zero recordable safety incidents.**

The plant was the first in the state to receive exemplary achievement, as recognized by the Occupational Safety & Health Administration (OSHA), in the prevention and control of occupational safety and health hazards development, implementation, and continuous improvement of the safety and health management system.

The facility has qualified as a Voluntary Protection Program 'Star' since 2005, the OSHA's highest

designation. This designation is verified by an application review and a rigorous on-site evaluation by a team of OSHA safety and health experts.

**Our Island Generation plant in British Columbia achieved an exceptional 10 years**, or 3,651 days, without a single recordable incident.

By the end of 2011, our **Clover Bar Energy Centre had also achieved nearly four years without a recordable safety incident**, with the four-year milestone marked in January 2012.

"Safety is an attitude, and all Tiverton employees take ownership and hold each other accountable. We want to be able to come home from work the way we arrived and be able to support our families at home."

Tricia Keegan, Tiverton Plant Manager

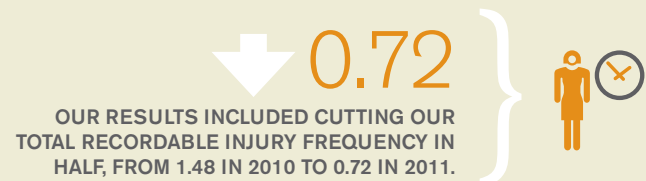




# IMPROVED SAFETY PERFORMANCE IN 2011

**By tightening our focus on safety, we achieved a significantly better year-over-year safety record in 2011.**

New safety management systems were implemented, safety procedures were updated, and office safety programs were established at all office locations.



## CONTRACTOR SAFETY PERFORMANCE

number of medical treatments

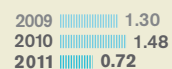


number of lost time injuries



## TOTAL RECORDABLE INJURY/ILLNESS FREQUENCY (TRIF)

Capital Power



Canadian Electricity Association average

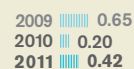


TRIF = (total recordable injuries / total exposure hours) x 200,000, where recordable injuries include medical treatment, lost time injury, fatality, and other recordable incidents (restricted work and loss of consciousness).

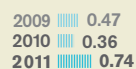
The industry standard of calculating a normalized injury/illness rate is used to compare our safety performance year-over-year. Total Recordable Injury Frequency (TRIF) normalizes rates based on the number of hours worked and allows an 'apples-to-apples' comparison to other companies and industry sources, 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).

## LOST TIME INJURY FREQUENCY

Capital Power

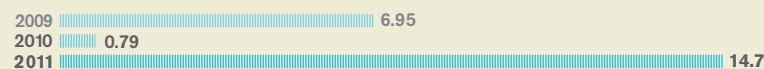


Canadian Electricity Association average



## LOST TIME INJURY SEVERITY

Capital Power



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

The injury rate is commonly referred to as the "frequency rate" and the lost work-day rate as the "severity rate". The severity rate measures the more serious injuries involving lost work days. The frequency rate is limited because it gives equal weighting to both major and minor injuries.



Built by Capital Power, Keephills 3 was commissioned in November 2011 with an excellent construction safety record and zero lost-time incidents in the last 3.2 million hours worked.

10 { 

EMPLOYEES WERE INJURED IN 2011

# We are focused on safety.



In October 2011, we received the Canadian Electricity Association President's Award of Excellence for Employee Safety for 2010 (bronze level) for top quartile safety performance relative to our peers.

Although our overall safety record improved in 2011, ten employees were injured seriously enough that they required medical attention, and four incidents resulted in lost time, for a total of 204 lost days.

Our lost-time injury frequency and severity increased compared to 2010 because the severity of one injury resulted in an extended number of lost days. Most of these incidents were related to general and routine work that is not directly attributable to operation and maintenance activity.

While one injury is too many, the higher risk activities directly related to operating and maintenance activity were done safely.

## NINE HEALTH AND SAFETY COMMITTEES

Our operating plants have health and safety committees. Eighty-one Capital Power employees served on nine committees in 2011, a decrease from 2010 due to the divestiture of the CPILP facilities.

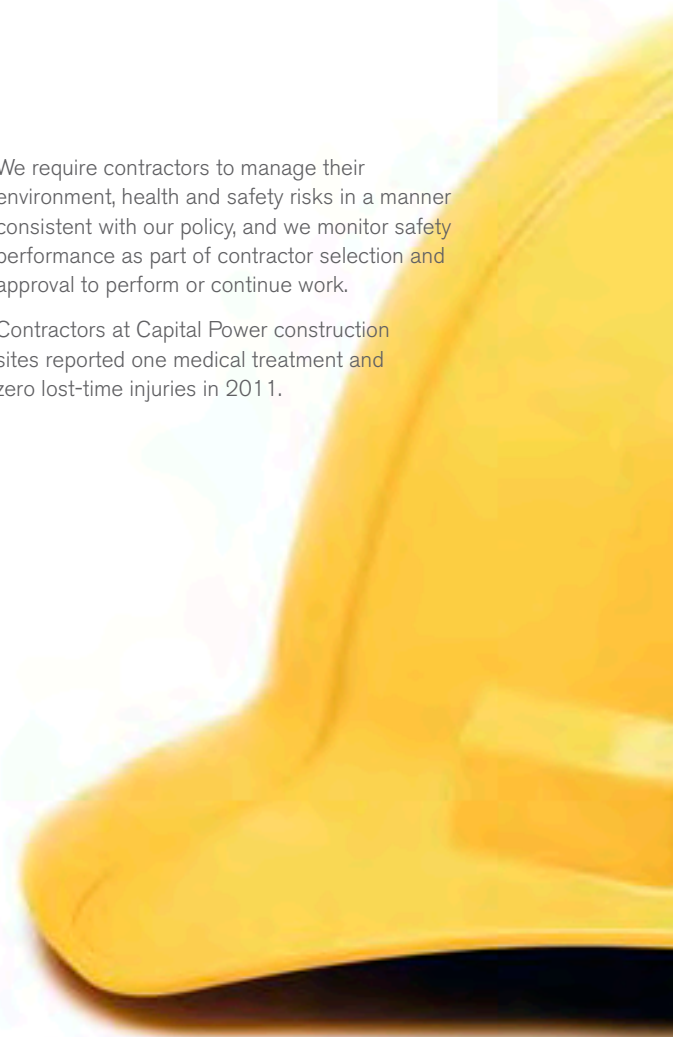
Ongoing safety training is mandatory for employees in field or operating positions, and crews hold daily safety planning meetings. Joint manager-worker safety committees meet regularly, and all contractors and subcontractors working on our sites must meet strict safety standards.

## CONSTRUCTION SAFETY PERFORMANCE

Two significant construction projects – the Quality Wind and Halkirk Wind projects – were underway in 2011, and one project – Keephills 3 – reached completion in 2011. More than 858,490 construction hours were recorded in 2011. This is equivalent to 447 full-time employees.

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.

Contractors at Capital Power construction sites reported one medical treatment and zero lost-time injuries in 2011.





# We operate responsibly.

## RISK MANAGEMENT

Our risk management process includes controls and procedures for reducing controllable risks to acceptable levels and the identification of actions for events outside management's control.

The Board of Directors provides oversight to the risk management process, which includes identification, evaluation, reporting, monitoring, and mitigation of key risks that may affect the achievement of our business objectives.

Management is responsible for approval of the framework for: enterprise risk management; policy review and recommendations; risk management policies and processes; monitoring and reporting of compliance with the policies and processes; and conducting risk mitigation activities within specific operational areas.

Our risks and risk management are described in detail in our Management's Discussion and Analysis found in our 2011 Annual Report.

www.

## CORRUPTION RISK

We conduct an annual fraud risk assessment across the entire organization. It considers all areas of the business and includes potential fraud scenarios. If gaps are identified in control structures, remedial action plans are developed. In 2011, we received three complaints about misuse of Capital Power resources and assets and one complaint about other conflicts of interest. In all four incidents, employees were dismissed or disciplined.

## HUMAN RIGHTS

None of our operations are at risk for incidents of child labour or forced labour. The right to free association and collective bargaining is not at significant risk. We have not been subject to human rights reviews or any impact assessments.

Zero human rights violations, including the rights of indigenous people, were identified in 2011, and all security personnel receive training in policies and procedures related to human rights. Our contractors must align with our policies, although they do not undergo a specific screening on human rights. We do not have significant investment agreements that include human rights clauses.

## PRECAUTIONARY PRINCIPLE

When any Canadian statutory decision maker, court or tribunal applies the precautionary principle in making its determination, we consider this principle in the conduct of our 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. In 2011, the company reports:

- Zero incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services;
- Zero incidents of non-compliance with labelling requirements;
- Zero customer satisfaction practices or survey results;
- Zero legal actions for anti-competitive or monopolistic behaviour;
- Zero complaints to a Human Rights Commission;
- Zero incidents of non-compliance marketing and advertising codes;
- Zero injuries or fatalities to members of the public due to incidents involving our facilities; and

- Zero substantiated complaints regarding breaches of customer privacy or losses of customer data.

## FINES RECEIVED IN 2011

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.

In 2011, the MSA issued specified penalties to Capital Power for three incidents in late 2010 and two in early 2011, for total fines of \$12,750. These incidents were primarily the result of human error, related to the application of Rule 6.3.3 of Alberta's power market trading regulations. Our Regulatory Compliance team works with internal groups to identify opportunities for process improvements, whether a fine is issued or not.

The Ontario IESO (Interconnected Electric System Operator) assessed fines totalling \$3,500 for two separate incidents that occurred at the Kingsbridge I Wind facility. The fines were primarily the result of errors in communication between our staff and the IESO. Measures have been implemented at the Kingsbridge facility to ensure this issue does not recur.

## LOCAL HIRING AND PROCUREMENT

We support community growth and put a priority on local hiring. With qualifications being equal, a local applicant will be selected over a non-local applicant. In 2011, we spent \$415 million (2010 – \$419 million) with our top 25 suppliers of goods and services. Of this amount, \$57 million or 14% (2010 – \$255 million or 61%) was defined as local spending where the shipping destination and supplier site were both in the same jurisdiction.



# We are prepared, safe and reliable.

Company-wide and site-specific contingency planning is designed to prepare our facilities for emergencies and ensure they are able to operate responsibly during and after an emergency.

## BRIDGEPORT WEATHERS TROPICAL STORM IRENE

Our Bridgeport facility in Connecticut provided continual power service when tropical storm Irene hit the east coast of the U.S. in August 2011. Diligent planning, continuous monitoring as the storm drew near, and the dedication of our plant operators minimized the flood damage to the facility and ensured that electricity service remained uninterrupted.

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





**We are investing in  
our communities.**





In 2011, we contributed \$1.2 million\* to a variety of programs and charitable organizations in communities throughout North America.

## TREATING EACH COMMUNITY AS UNIQUE

We contribute to vibrant, sustainable communities through an integrated and focused community investment program, which 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 organizations.
- 3 Head office program:** As one of the largest companies headquartered in Edmonton, Capital Power helps build Edmonton's capacity as a great city in which to live and work by supporting Edmonton-based organizations.

\* Includes CPILP facility contributions.



We support registered non-profit groups and charitable organizations in communities where we do business.

Some of the investments in 2011 included:

Campbell River Salmon Festival,  
Campbell River, BC

The Barnum Museum Foundation,  
Bridgeport, CT

Tumbler Ridge Community Garden and  
Composting Society, Tumbler Ridge, BC

Tumbler Ridge Search and Rescue Society,  
Tumbler Ridge, BC

Wolverine Nordic and Mountain Society,  
Tumbler Ridge, BC

Genesee Pumpkin Festival, Warburg, AB

Tiverton Lions Charities, Tiverton, RI

Halkirk Elks Bullarama, Halkirk, AB

West Moberly Days, Moberly Lake, BC

Cardinal Shehan Center, Bridgeport, CT

Lucknow Fall Fair, Lucknow, ON

Black Mountain of Maine –  
Need to Ski program, Rumford, ME

Goderich Children's Festival, Goderich, ON

Williams Lake Stampede Association,  
Williams Lake, BC

Warburg Canada Day, Warburg, AB

Paintearth Regional Response Group, Castor, AB

Huron Arts & Heritage Network, Clinton, ON





2011 EmPowering Communities grants went to a wide variety of organizations, including:

**American Cancer Society**  
**Barrington Tapin Inc (Rhode Island)**  
**Cub Scouts Pack 15 of Portland (Connecticut)**  
**Calgary Young People's Theatre Society (Alberta)**  
**Capilano Playschool Association (Alberta)**  
**Canadian Search Dog Association**  
**Edmonton Down Syndrome Society (Alberta)**  
**Lupus Society of Alberta**  
**Rabbit Hill Ski Club (Alberta)**  
**Richmond Dance Society (British Columbia)**  
**Rocket Alumni Club (North Carolina)**  
**Skowhegan State Fair (Maine)**  
**Stony Plain Fire Department (Alberta)**  
**Warburg Junior Curling Club (Alberta)**

## CULTURE OF ENGAGEMENT AND SUPPORT

We believe in being an engaged and participating member of the community.

### EMPOWERING COMMUNITIES

EmPowering Communities, our Employee Volunteer program, encourages employee volunteerism and recognizes the valuable gifts of time, skill and knowledge that employees give to the community.

Employees and their families who volunteer a combined minimum of 35 hours in a calendar year can apply for a \$500 grant from Capital Power to a non-profit or charitable community service organization of their choice. Referral grants of \$250 are also issued to employees referring co-workers who participate in the program for the first time.

"I chose to volunteer to not only help others, but to be a representative of Capital Power in the community. The experience has strengthened my commitment to the company and is helping me to explore other opportunities that will allow me to expand my career and personal growth as an individual."

**Brian Medeiros, Operator, Tiverton, Rhode Island**

In 2011, 107 new participants were involved in the program, including 51 people who participated in the program for the first time after being referred by a colleague.

Approximately 13,500 hours in volunteer time was reported by employees and their families in 2011. In recognition of these community volunteer efforts, we contributed \$95,750 to non-profit organizations across North America.

13,500 {  
 VOLUNTEER HOURS REPORTED BY  
 EMPLOYEES AND THEIR FAMILIES







Major Mark Campbell, who lost both legs from injuries suffered in Afghanistan, accepted the donation from Senior V.P. Bryan DeNeve. "Valour Place is going to go a long way to supporting our troops and their families when they need it the most," said Major Campbell.

#### EDMONTON ESKIMOS' MILITARY APPRECIATION NIGHT

Edmonton Eskimo fans enjoyed watching a great game of CFL football in July 2011 while showing their community spirit and support for Canada's military men, women and veterans. We proudly sponsored the annual Military Appreciation Night in support of Valour Place. Once constructed, the facility will offer essential rehabilitation and medical treatment for injured soldiers, veterans and their families when they are in Edmonton.

Employee volunteers and their families, along with volunteers from Valour Place, participated in a pre-game fundraiser selling limited edition "Support Our Troops" T-shirts. Approximately \$20,000 in donations was received from fans, which we matched for a total contribution of \$40,000 towards the construction of Valour Place.

Employees were also able to use their time towards the EmPowering Communities Employee Volunteer Grant.

#### COMMUNITY FESTIVALS

Our sponsorship of the annual **SalmonFest** Celebrations in Campbell River, British Columbia provided free activities and rides for children while supporting the community's heritage sport of logging.

As a first-time sponsor of **Bullarama** in Halkirk, Alberta, we helped bring rodeo programs and family activities to the community in 2011.

In Ontario, near our Kingsbridge I wind-power facility, we sponsored the **Dungannon Truck & Tractor Super Pull**, and thousands of community members came together for this popular event.

#### RACE WEEK EDMONTON

We were the presenting sponsor of Race Week, Edmonton's 2nd annual Go Kit Derby, where 30 kids raced their homemade cars down a 200-foot course.

Our employees volunteered, assisting with setup and takedown and by acting as race marshals.





#### VOLUNTEERING AS A TEAM

Sixteen teams involving 81 employees lent their support to various community organizations in need of volunteers. Employees work together to build camaraderie with their colleagues and connections with the community.

#### INNER-CITY AGENCY SUPPORT

In the weeks leading up to the Christmas holiday season, employees donated an assortment of items needed by some of the inner-city agencies neighbouring the new Edmonton office tower where our head office relocated in the fall of 2011.

Boxes of unwrapped gifts were collected and delivered to the Salvation Army for distribution to children.

Employees also donated winter jackets for clients of Operation Friendship Seniors Society, a non-profit society that provides preventive social services to seniors in Edmonton's inner city.

Each of the organizations also received a cash contribution of \$3,500 on behalf of Capital Power's Board of Directors, in lieu of Christmas gifts.

#### GODERICH AND AREA DISASTER RELIEF FUND

On August 21, 2011, a tornado devastated parts of the community of Goderich, Ontario, a neighbour community to our Kingsbridge I Wind Power facility. Many homes near the facility were damaged or destroyed.

We joined with our partners in the K2 Wind Power Project to help restore the town of Goderich to its original beauty. Each partner donated \$50,000, for a total of \$150,000, to the Goderich Disaster Relief Fund. With the Government of Ontario matching donations by two-to-one, a total of \$450,000 went towards rebuilding Goderich – "the prettiest town in Canada."

The funds raised were made available to homeowners, tenants, small businesses, farmers and non-profit organizations to cover expenses related to the tornado damage that were not covered by insurance. The monies were also used to help those in nearby townships, including Ashfield-Colborne-Wawanosh (ACW), where Kingsbridge I is located.

#### UNITED WAY

Our 2nd annual United Way campaign raised more than \$347,000. This is a 19% increase from our 2010 campaign. Collectively, employees throughout Canada and the United States contributed nearly \$166,000 through personal pledges, which were matched dollar-for-dollar by the company.





## SUPPORTING ARTS AND CULTURE

### ART GALLERY OF ALBERTA

The Art Gallery of Alberta (AGA), the National Gallery of Canada, and Capital Power have been working together since 2009, through the Capital Powered Art Program, to bring great art to the City of Edmonton and the Province of Alberta.

For the National Gallery, it is an opportunity to take Canada's national art collection on the road and share it with Albertans and Edmontonians. For the AGA, it's an opportunity to showcase its fantastic facility and to demonstrate how the AGA has cemented its place as a leading regional gallery.

### THE CITADEL THEATRE

Capital Power proudly sponsored The Citadel Theatre's production of *The Three Musketeers*. The theatre is recognized as a leader in Canadian arts, producing work of the highest quality while developing the skills of professional artists, investing in youth and families and contributing to the quality of life in the Edmonton community.

### THE BARNUM MUSEUM FOUNDATION

When a tornado touched down in Bridgeport, Connecticut in June 2010, the Barnum Museum and many pieces of its historical collection were damaged, resulting in the closure of the facility. To support the recovery and repair process, we were a sponsor of a "Save the Museum" Gala in 2011. Approximately \$57,000 was raised to support the tornado recovery efforts.

### 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 are helping to sustain this unique biennial festival, with a commitment to multi-year funding until 2014.

As a teaser for the next full Festival taking place in November 2012, we were pleased to be the 2011 presenting supporter of "An Evening with Michael Ondaatje", award-winning novelist, poet, filmmaker and editor. Best known as the author of *The English Patient*, Mr. Ondaatje captivated a sold-out audience of more than 1,050 with a reading from his latest bestselling novel, *The Cat's Table*.

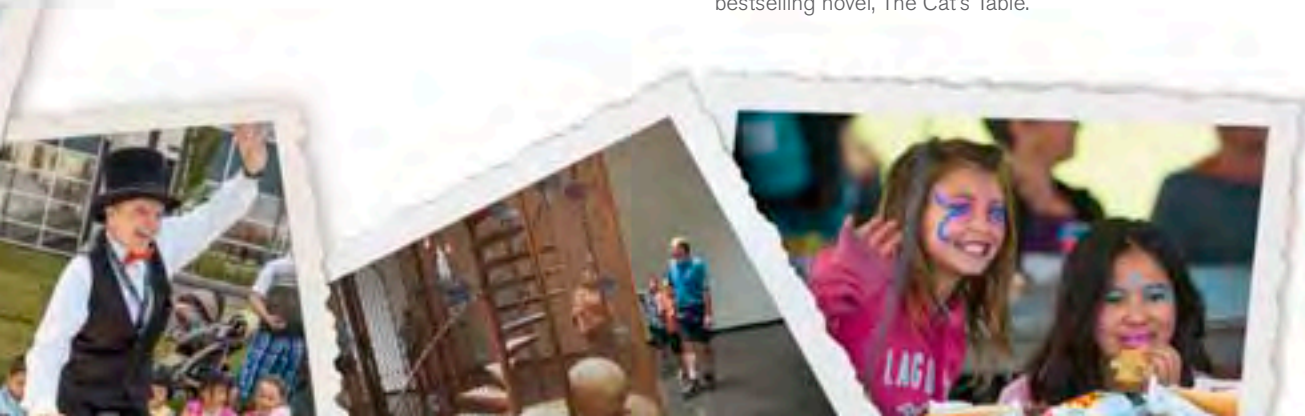
### TELUS WORLD OF SCIENCE, EDMONTON

We partnered with the TELUS World of Science to bring "The Chronicles of Narnia: The Exhibition" to Edmonton. The partnership demonstrated our shared passion for innovation, lifelong learning, and community involvement that strengthens our city and region. As part of the sponsorship, Capital Power employees and their families participated in an Employee Family Day event at the facility.

### CONTINUOUS COMMITMENT TO HEALTH AND SAFETY

We continued our three-year partnership, established in 2010, with STARS (Shock Trauma Air Rescue Society) to support the Critical Care and Transport Medicine Academy. STARS is an integral part of our emergency response plan at the Genesee Generating Station in the Town of Warburg, Alberta.

Through this innovative education and training opportunity, vital health-care education is delivered to both rural and urban medical professionals. Since its inception in 2009, the Academy has successfully graduated 72 emergency care professionals who now have a uniquely and highly specialized skill set.





## CONSULTATION AND ENGAGEMENT:

# We align with our stakeholders' interests and priorities.

### STAKEHOLDER ENGAGEMENT PHILOSOPHY

Effective stakeholder engagement is critical to our vision of being one of North America's most respected, reliable and competitive power generators.

We draw on best practices in public consultation and actively consult our stakeholders, particularly in regard to

new projects or existing facilities. Project teams develop consultation processes that provide stakeholders with multiple opportunities to learn about our projects and to provide input to our project development teams. Our goal is to have critical infrastructure permitted, built, and operated in a way that aligns with the interests and priorities of the community.





## ADDRESSING DISPLACEMENT

Our operations sometimes require the purchase of additional land from surrounding land owners. Currently, only our Genesee facility requires additional land.

Our policy ensures fair market value for land, and other forms of compensation for landowner time, moving expenses, and legal fees. Consultation and dialogue with community members is ongoing.

### GENESEE MINE EXTENSION PROPOSAL

The proposed Genesee Mine Extension would provide a secure fuel supply to the three generating units at the Genesee facility. The proposed extension includes 14.5 sections (or 9,280 acres) of land. Land acquisitions would affect 31 private owners, of which 22 have dwellings in the project area. The number of people impacted is between 45 and 65 people. Consultation activities formally began in 2010 and continued in 2011.

### DIRECT ENGAGEMENT

Direct engagement with stakeholders is a significant element of this process. We meet with landowners in the manner that best suits them. Most conversations regarding land occur in the Land Management Office, which is outside the security gate of the Genesee facility. It was specifically designed for this purpose and provides a more neutral setting for land discussions.

### LAND PURCHASE PROGRAM

Stakeholder input has also shaped the Land Purchase program, which includes:

- A premium of 25% on market value of land for landowners whose land is required;
- Flexibility to accommodate landowners who express a desire to remain living on their land for as long as mining advancement would allow;
- The opportunity for landowners to sell their land in advance of when it is required, in order to accommodate personal circumstances;
- The opportunity for landowners who are not eligible for the program but want to sell their land to be placed on a seller's list, which is given to landowners who are negotiating to sell their land for the project but want to remain in the area;
- Reimbursement for reasonable legal, appraisal and accounting costs as well as reimbursement for a landowner's reasonable time spent during negotiations; and
- The option for farmland renters to lease purchased farmland under the terms of a lease at the current Capital Power rental rates until the land is required for mining purposes.

Purchase of lands outside the project area will be considered where the operations of a viable farm may be affected by the purchase of land within the project area (i.e. economic farm unit).

We reached agreements with 21 of 31 landowners in 2011. A number of landowners indicated their interest to remain in the Genesee area and have requested a land trade rather than cash settlement. We are working to ensure as many requests as possible can be accommodated.

Other consultation activities at Genesee included an open house, three newsletters to the community, and information posted to our website. This work is documented in the Regulatory Application filed in October 2011 with the Energy Resources Conservation Board and Alberta Environment.

### GENESEE GENERATING STATION AND MINE

For over 20 years, the Genesee Generating Station has operated west of Edmonton, Alberta.

Genesee 3, commissioned in 2005, is one of the most advanced, fuel-efficient, and environmentally progressive coal-powered facilities in Canada.

We maintain open communication with local stakeholders and adapt our operations, where possible, based on community feedback.





## QUALITY WIND PROJECT ON TRACK FOR 2012

Our Quality Wind project in the majestic Tumbler Ridge area of British Columbia will generate renewable power under contract to B.C. Hydro. The 142-MW facility, consists of 79 wind turbines, is being built in an area previously developed for mining, logging, and oil and gas activity.

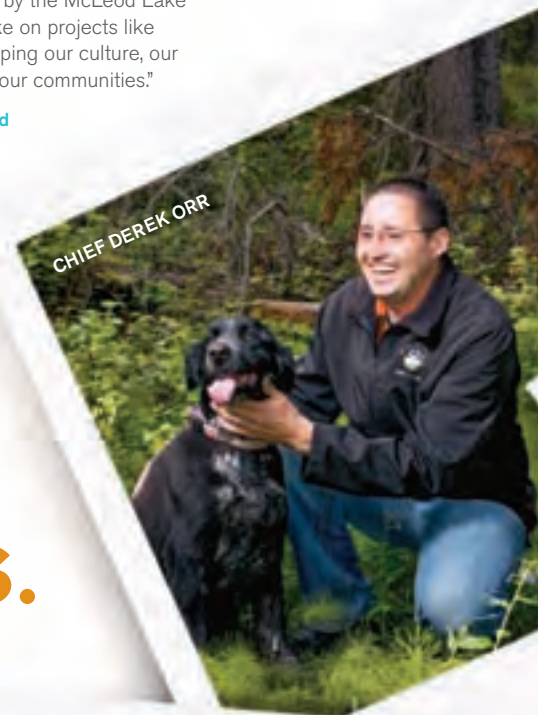
The site is also an area that was ravaged by forest fire in 2006. Due to the damage caused by the Hourglass Fire, which destroyed 11,000 hectares of forest, the Quality Wind project required minimal tree removal during construction.

# We build trust with our neighbours by respecting what matters.

"New partners, new opportunities...  
that's the gift of our partnership with  
Quality Wind."

"Duz Cho Construction is wholly owned by the McLeod Lake Indian Band... and the revenue we make on projects like Quality Wind provides money for developing our culture, our economy, our traditional territories, and our communities."

**Chief Derek Orr, McLeod Lake Indian Band**



**GARY BOUWMAN**



We plan to have a strong  
presence in the community.

"We're hiring a new wind farm manager here and will be hiring a couple of other people to help him. It's important to have local staff in the community."

**Gary Bouwman, Senior Manager,  
Renewables, Capital Power**

QUALITY WIND, BC







MAYOR DARWIN WREN

DR. CHARLES HELM

“Corporations have to invest in community. They have to take ownership and help build a sustainable community for the long term.”

“Capital Power’s project is like a missing piece of a puzzle in terms of diversifying the economy for the long term. It’s bringing jobs... it’s bringing prosperity... it’s bringing optimism. It is a very important piece for the future of Tumbler Ridge and economic stability.

“Having workers here, putting buildings in place, putting offices, having a presence... that’s critical... and thus far, Capital Power’s done a great job of it.”

**Mayor Darwin Wren, District of Tumbler Ridge**

“I’m an amateur ornithologist... I love the birds.”

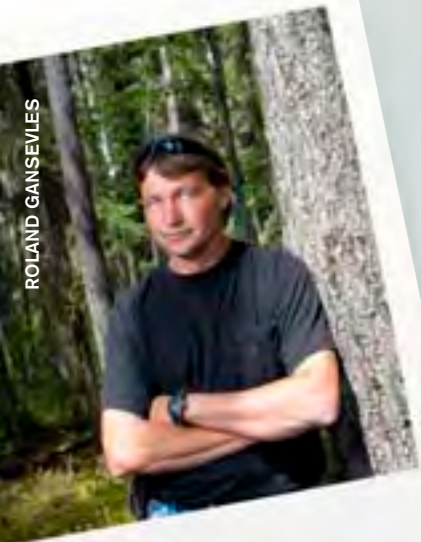
“Extremely high-quality research was done on both bats and birds here... and to say that there’s going to be zero mortality of bats and birds – no, there’s never zero anything... but I know the company is concerned about it... they’ve done good research and they’ve tried very hard to avoid the areas of highest impact.

“From the very beginning, me and my friends who have an environmental leaning, we said of all the projects that we’ve seen, this is the one we want to lend our support to.

“When we told them that where they’re building the windmills is potential dinosaur country – they were the first group that said OK, we believe in this, and we’ll work with you, and now we have a signed agreement between the company and our museum foundation and our research centre... it’s actually the first of its kind in British Columbia... that if you find stuff – and we’re going to train you, we’re going to show you guys what to look for, and if you find it you’ll come and tell us.”

**Dr. Charles Helm, Physician, Tumbler Ridge**





### ABORIGINAL COMPANIES CONTRACTED FOR QUALITY WIND

Building on our work in 2010, we developed a procurement process specifically for Aboriginal companies and their partners. Contracts were awarded to six First Nation and Aboriginal companies, based on competitive pricing and qualifications. These companies provided almost 50% of the labour during the first year of construction, and 20% of the labour during 2011.

Among the companies engaged were Duz Cho Construction, owned by the McLeod Lake Indian Band, and Dunne-za Ventures, owned by the West Moberly First Nations, both companies with knowledge in local geotechnical and surface conditions. This led to a significant improvement in the road design and erosion and sediment control methodologies.



“We did all the roads, excavation, backfill and foundations for the turbines.”

Roland Gansevles, Division Manager, Wind, Duz Cho Construction

## COMMUNITY ENGAGEMENT AND ABORIGINAL CONSULTATION

- **Consultation with the Tumbler Ridge community** continued throughout 2011, the first full year of construction of Quality Wind. We met with the District of Tumbler Ridge Council to provide information on the upcoming construction season and to receive input on matters such as traffic impacts and worker accommodation.
- **The Tumbler Ridge Council expressed the importance of engaging local businesses** in project opportunities. We responded, with \$3.85 million\* spent on direct business with local companies in 2011.
- **Our prime contractor Mortenson held job fairs** in Tumbler Ridge, Chetwynd, and three Aboriginal communities to inform local and area residents about employment opportunities and vocational requirements for employment.
- **We engaged with the Tumbler Ridge Museum Foundation and the Peace Region Paleontology Research Centre** to produce a Paleontology Encounter Procedure to preserve important fossil finds during the clearing and excavation of the Quality Wind site.
- **Community Benefits Agreements were ratified** with the Saulteau First Nation, the West Moberly First Nations and the McLeod Lake Indian Band. These agreements provide a range of long-term financial benefits, scholarships, community event support, and specify information-sharing commitments.

\* This figure represents combined Capital Power and Mortenson local spending (not including hotels, restaurants, groceries or fuel). It does not include contracting through First Nation businesses.



**We helped fund  
improvements to the  
Quality Canyon trail system.**



## WIND PROJECTS IN ONTARIO AND ALBERTA

### PORT DOVER & NANTICOKE WIND PROJECT, ONTARIO

In mid-2011, we submitted an application for regulatory approval for the Port Dover & Nanticoke Wind project. As required by Ontario's Renewable Energy Approval (REA) process, public notice of the application was provided on Ontario's Environmental Registry website, and copies of the required regulatory documents were placed at key locations throughout the community and posted on our website. The public had an opportunity to provide input to the government during a Public Comment period from June to August 2011.

- **We received feedback from stakeholders** through one-on-one meetings, direct mail, email, post, phone, and open houses. Approximately 450 people attended seven open houses from 2009 to early 2012.
- **An extensive range of communication activities**, including numerous meetings, occurred with the representatives of four Aboriginal communities and two municipal

governments. Contact was also undertaken with numerous federal and provincial agencies.

- **We adapted key elements of our project design** in response to a request from the County of Haldimand to bury the project's collector system. More than 90% of the electrical collector system will be underground.
- **In response to input from Haldimand County**, we worked with other renewable power proponents to develop a Community Vibrancy Fund (CVF). Following the start of commercial operation of our wind power facility, we will provide annual funding through the CVF to support community initiatives, such as parks and recreation, environmental initiatives, infrastructure improvements, and other activities identified by County Council.
- **We engaged with four Aboriginal communities to identify potential impacts**, including on constitutionally protected Aboriginal or treaty rights. We also welcomed Aboriginal community involvement in the archeology process.

- **We attended local job fairs and other community events**, discussed employment and contracting processes and timelines, and met to discuss long-term relationships with several communities.

### K2 WIND POWER PROJECT, ONTARIO

We announced a limited partnership with Samsung Renewable Energy Inc. and Pattern Renewable Holdings Canada ULC to develop, construct and operate the 270-MW K2 Wind Power Project, Ontario. The REA process commenced in 2006, and the project team has been actively engaging local stakeholders and regional Aboriginal communities for several years.

- **Consultation activities in 2011** included an open house, attended by more than 100 people, two newsletters, information sessions with landowners, and numerous one-on-one contacts either in-person, by phone or email.





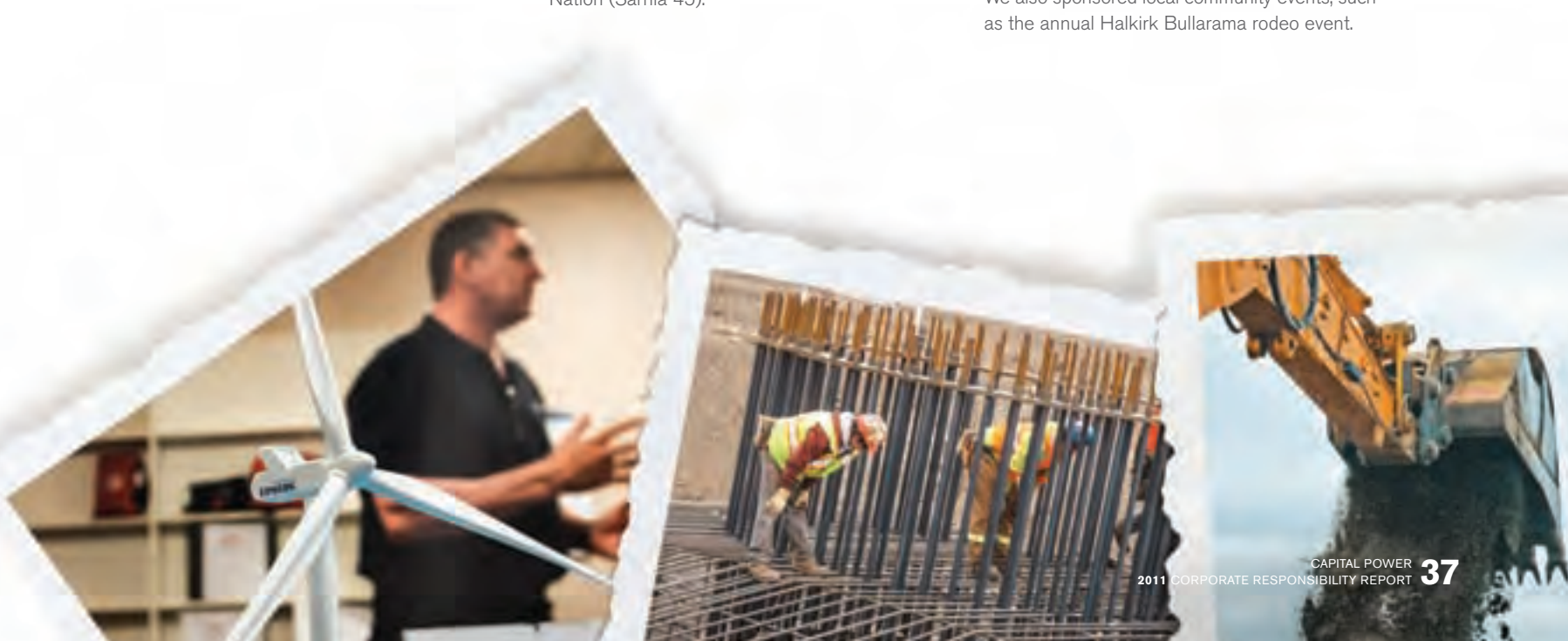


## We welcomed Aboriginal community involvement in the archeology process.

- **We engaged municipal governments** and consulted specifically on a number of project planning components, including construction, operations and decommissioning planning, use of municipal rights-of-way, traffic management and road use.
- **We met with the Township of Ashfield-Colborne-Wawanosh (ACW)** throughout the year and provided documents for the REA process in late 2011. Concerns about the visual impact of equipment and infrastructure have been incorporated into the project plan, and power lines used to collect and distribute energy from the turbines will be buried, where possible.
- **We responded to a number of requests** to change the proposed locations of turbines on certain properties to ensure they did not interfere with the anticipated construction of homes in the future and, in some cases, to preserve the view of landowners and their neighbours.
- **Aboriginal engagement** also continued in 2011. The communities we are engaging include the Saugeen Ojibway Nation and the Nawash Unceded First Nation (collectively referred to as the Saugeen Ojibway Nation), and the Métis Nation of Ontario, Historic Saugeen Métis, Kettle & Stony Point First Nation, Walpole Island First Nation, Chippewas of the Thames First Nation, and the Aamjiwnaang First Nation (Sarnia 45).
- **In response to the Saugeen Ojibway Nation's interest in the archaeology fieldwork**, several community members were employed as site monitors during field investigations. We also provided resources to assess technical information.

### HALKIRK WIND PROJECT, ALBERTA

Following the acquisition of the Halkirk Wind Project in June 2011, we began engaging local stakeholders in advance of project construction. Letters of introduction were sent to residents, meetings with municipal government staff and elected officials were held, an introductory barbecue dinner for 165 people was hosted, and a newsletter was distributed to area residents. We also sponsored local community events, such as the annual Halkirk Bullarama rodeo event.











**We deliver results.**

**PERFORMANCE**



# STRATEGY AND ANALYSIS

## ON TRACK WITH OUR STRATEGY



### CORPORATE 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, diversifying by region and fuel type, ensuring safety, and becoming a desirable employer.

PATRICK HALPIN, TIVERTON, RHODE ISLAND



# We are delivering on strategy.

Our business strategy was set out at the time of our Initial Public Offering in 2009. We continued to deliver on that strategy in 2011, exceeding the majority of our financial targets and maintaining an investment-grade credit rating.

Operational excellence was achieved while we selectively pursued growth opportunities that aligned with our investment criteria. An appropriate balance of merchant and contracted facilities was maintained in the target markets identified in our business strategy.

## KEY ELEMENTS OF OUR STRATEGY INCLUDE:

# 1

### OUR VISION

Become one of North America's most respected, reliable, and competitive power generators.

# 2

### OUR TARGETS

Are to instill a results-oriented culture with top quartile shareholder returns among peers and be an industry leader in commitment to safety.

# 3

### GEOGRAPHIC FOCUS

A geographic focus and creating 'networked hubs' of assets in a limited number of target markets to facilitate the management of assets on a portfolio basis, the application of market expertise, and to create economies of scale.

# 4

### TECHNOLOGY FOCUS

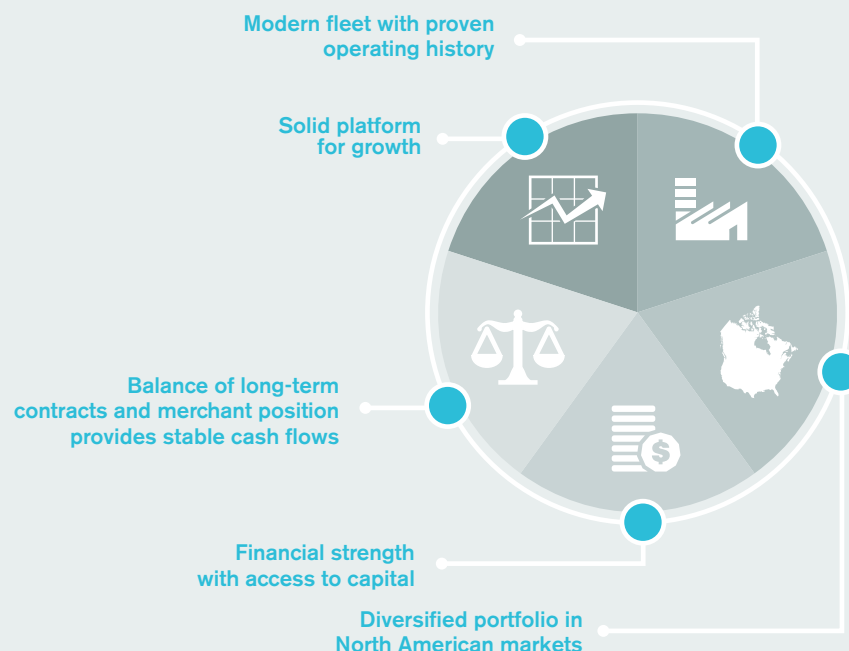
A technology focus that includes developing and operating a limited number of power generation technologies to build operating, maintenance and construction expertise, better supplier relationships, and management of common spares.

# 5

### INVESTMENT-GRADE CREDIT RATING

Maintaining an investment-grade credit rating for access to low-cost capital throughout the business cycle by balancing contracted and merchant generation and providing shareholders with a dividend competitive with our peers.

## CORPORATE STRENGTHS





## OPERATING PERFORMANCE

We are a safe and skilled operator with a high-output fleet averaging 92% availability in 2011. Plant availability represents the percentage of time the plant was available to generate power, regardless of whether or not it was running. Availability is reduced by planned and unplanned outages.

Plant availability by plant category was as follows:

	Year ended December 31	
	2011	2010
Alberta commercial plants	87%	84%
Alberta contracted plants	97%	96%
Ontario and British Columbia contracted plants	98%	90%
Northeast U.S. commercial plants	88%	n/a
North Carolina U.S. contracted plants	100%	n/a

More detailed plant availability by facility can be found in our 2011 Annual Report.



## CORPORATE TARGETS AND PERFORMANCE

	2011 TARGET	ACTUAL RESULTS	2012 TARGET*
<b>OPERATIONAL EXCELLENCE</b>			
Plant availability average	94% or greater	92%	91% or greater
Capital expenditures for plant maintenance, mine extension and other	Approximately \$56 million	\$71 million	\$108 million or lower
Maintenance and operating expenses	n/a	n/a	\$215 million to \$235 million
<b>FINANCIAL STABILITY AND STRENGTH</b>			
Normalized earnings per share	\$1.16	\$1.24	\$1.50 to \$1.70
Funds from operations	Modestly higher than the 2010 result of \$277 million	\$352 million	\$380 million to \$420 million
Cash flow per share	Modestly higher than the 2010 result of \$3.53	\$3.89	\$3.90 to \$4.30
Dividend coverage ratio	Modestly higher than the 2010 result of 2.1 times	2.1 times	2.2 times to 2.8 times
<b>ENHANCING SHAREHOLDER VALUE</b>			
Final construction costs for Keephills 3 plant	\$955 million or less with commercial operation date in the second quarter of 2011	\$949 million; commercial operation began on September 1, 2011	n/a
Quality Wind project	Continue on time and on budget with commercial operation dates in 2012	On track with target	Continue on budget of \$455 million and on time with commercial operation date in the fourth quarter of 2012
Port Dover & Nanticoke Wind project	Continue on time and on budget with commercial operation date in 2012	Commercial operation date anticipated in 2013	Full notice to proceed in 2012
Halkirk Wind project	n/a	n/a	Continue on budget of \$357 million and on time with commercial operation date in the fourth quarter of 2012
K2 Wind Power Project	n/a	n/a	Full notice to proceed in 2012
<b>DISCIPLINED GROWTH</b>			
Committed capital for acquisition/developments that are in-line with targeted rates of return	\$1.5 billion or higher	\$1.4 billion committed	n/a

\* 2012 target lists Capital Power's targets as announced at Investor Day in December 2011. For updates on performance against targets, please consult our quarterly results announcements. [www.capitalpower.ca](http://www.capitalpower.ca)



# ECONOMIC IMPACTS<sup>(1)</sup>

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 our 2011 financial statements with the more specific financial disclosures required by the GRI guidelines. The result paints a picture of the stakeholders who are economically impacted by Capital Power.



## FINANCIAL HIGHLIGHTS

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

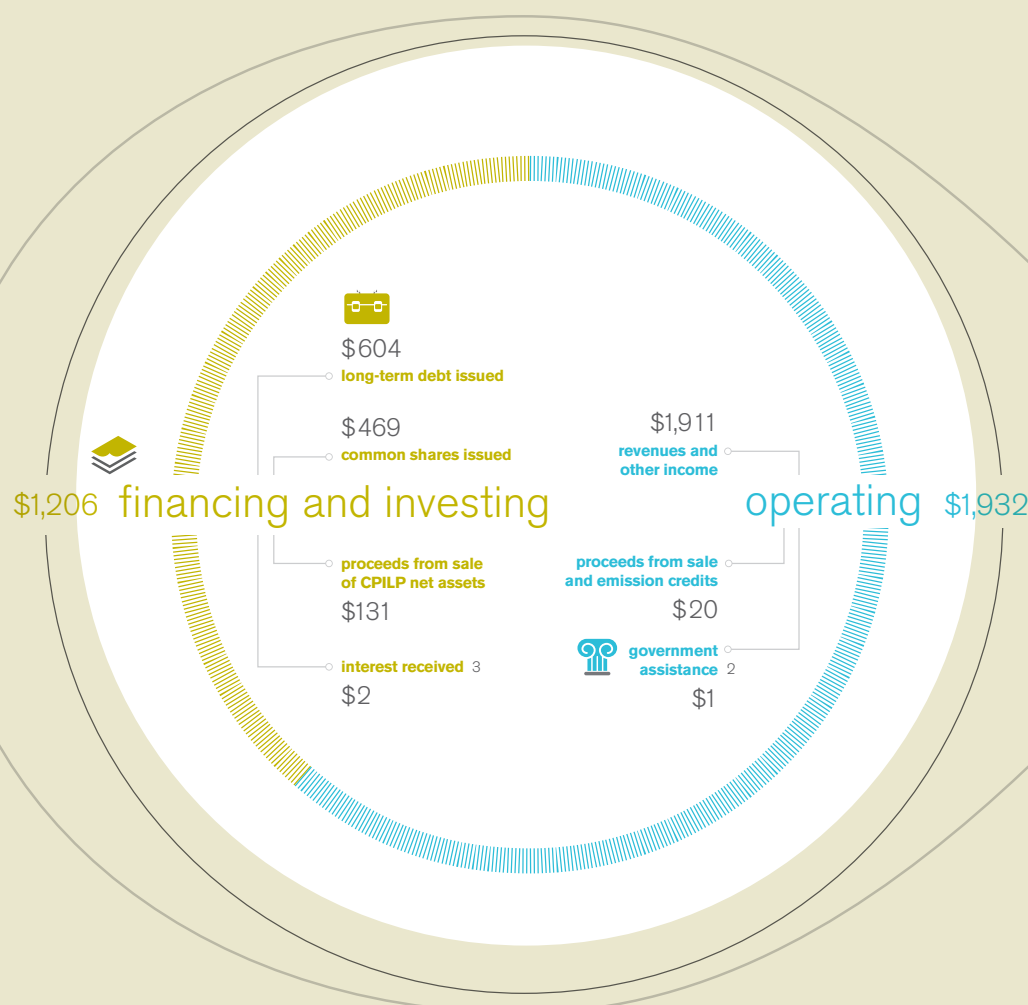
Year ended  
Dec 31, 2011

Revenues and other income	\$ 1,770
Gross income	\$ 866
Operating income	\$ 200
Net income	\$ 188
Net income attributable to shareholders of the company	\$ 77
Earnings per share – basic	\$ 1.60
Normalized earnings per share <sup>1</sup>	\$ 1.24
Dividends per common share	\$ 1.26
Funds from operations <sup>1</sup>	\$ 433
Capital expenditures	\$ 493

<sup>1</sup> Normalized earnings per share and funds from operations are non-GAAP (Generally Accepted Accounting Principles) financial measures and do not have standardized meanings prescribed by GAAP and, therefore, may not be comparable to similar measures used by other enterprises. See 'Non-GAAP Financial Measures' in the company's Management's Discussion and Analysis for the year ended December 31, 2011, which is available on the company's website at [www.capitalpower.com](http://www.capitalpower.com) and on SEDAR at [www.sedar.com](http://www.sedar.com).



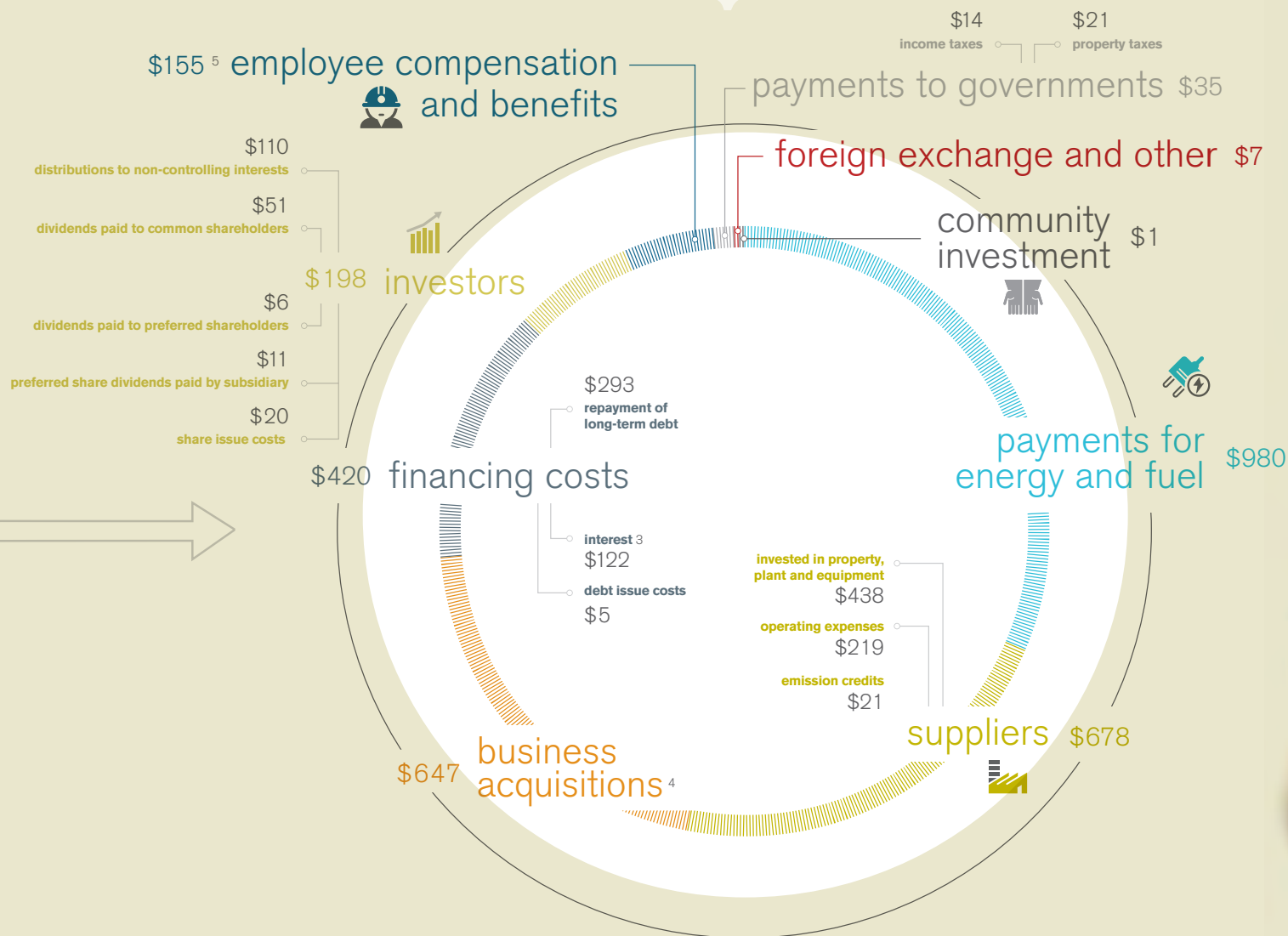
CASH INFLOWS TO THE COMPANY : \$3,138



<sup>2</sup> We receive approximately \$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.



# CASH OUTFLOWS TO THE COMPANY'S STAKEHOLDERS : \$3,121



<sup>3</sup> In 2011, \$36 million of interest on long-term debt was capitalized

<sup>4</sup> Business acquisitions net of acquired cash.

<sup>5</sup> Includes \$18 million for share-based equity payments and other pension amounts.

All data in millions of dollars. This infographic is based on information from Capital Power's 2011 financial statements but is not a substitute for them. Financial statements can be found online at [www.capitalpower.com](http://www.capitalpower.com) and [www.sedar.com](http://www.sedar.com).





# We manage our environmental footprint.

## Capital Power:

Uses the best available technology;

Has an award-winning land  
reclamation program;

Does not operate in or near  
protected areas and areas  
of high biodiversity;

Works with and within the community  
to discover innovative environmental  
practices; and

Works to operate our facilities  
safely, efficiently and with good  
maintenance practices.



# We responsibly manage environmental risk.

## GREENHOUSE GAS MANAGEMENT IN A RISK MANAGEMENT CONTEXT

We consider greenhouse gases (GHGs) and other environmental issues within the context of a broader risk management framework. Our approach to risk management is to identify, monitor, and manage the key controllable risks we face, and consider appropriate actions to respond to uncontrollable risks.

We use an Enterprise Risk Management (ERM) Program to identify, evaluate, report and monitor key risks. The ERM Program aligns with the International Organization for Standardization's standard for risk management, ISO 31000. Management is carried out at three levels, with risk assessments carried out in conjunction with core corporate processes.

Our principal risk factors – including environmental risks – are described in detail on pages 47 to 55 of our 2011 Annual Report. While each of the principal risks is discussed individually, we also make clear our view that risks should be considered as interdependent, and both understood and managed holistically.

We consider environmental risk from many perspectives: political, legislative and regulatory implications; impacts on technology; physical dimension – such as impacts from weather; and the potential for environmental matters to give rise to litigation or changes in reputation.

## THE ROLE OF GOVERNMENTS AND REGULATORS

Our operations are subject to extensive laws, regulations and guidelines relating to the following: generation and transmission of electricity; pollution, and protection of the environment; health and safety; air emissions; water usage; wastewater discharges; hazardous material handling and storage; treatment and disposal of waste and other materials; remediation of sites; and land-use responsibility.

We believe that a fundamental responsibility of governments and regulators is to establish policy targets and regulatory requirements that protect the physical environment and human health and reflect society's consensus about its priorities. We look to corporations, scientists and civil society to advise decision makers about their targets and the best policies and regulations through which they can be achieved.

Once enacted, our duty as a corporation is to comply with the laws, regulations and guidelines – and, by doing so, help achieve national, provincial and state environmental and health objectives. We also can, and do, take action that goes beyond existing legal requirements, and we take into account the Precautionary Principle when appropriate (see page 22).

## STRATEGIES FOR MANAGING ENVIRONMENTAL RISK

### 1 Comply

We work to comply with all applicable laws, regulations and guidelines, and we monitor compliance by performing environmental compliance audits with corrective actions as necessary. For data on environmental compliance, see pages 50-51.

### 2 Consult

We consult with all levels of government regarding policy development and current and potential legislation. For disclosure on our lobbying activities, see Public Policy on page 48.

### 3 Proactively identify

We proactively identify environmental risks within operations, maintenance and construction activities and we promote awareness throughout the company.

### 4 Ensure

We ensure that contractors align with our environmental policies and procedures. See page 21 for construction safety performance, the number of contractor hours, and required diligence.





We support Canadian targets and regulations that mandate emission reductions from coal-fired power generation, including national and provincial regulations that would significantly reduce GHG and air emissions from coal-fired electricity plants.

#### OUR POSITION ON CLIMATE CHANGE POLICY

We support Canadian targets and regulations that mandate emission reductions from coal-fired power generation, including national and provincial regulations that would significantly reduce GHG and air emissions from coal-fired electricity plants, helping Canada achieve its Copenhagen commitment to lower GHGs.

To support our position, our people have:

- Advised governments on the impacts of potential policies and regulations for the achievement of GHG reduction targets;
- Advised governments on implementation mechanisms for existing policies (such as Alberta's Specified Gas Emitters Regulation), including the creation of offset quantification protocols and the design of emission trading regimes; and
- Advocated within Canada, for a "Capital Stock Turnover" policy, which would mandate the shut-down of coal-fired generation facilities in Canada once they have reached a defined end of life, prohibit new coal-fired generation after 2015 (while permitting coal to be used in the future as an energy source for future low-emitting power technologies), and provide mechanisms for generators to achieve national targets within equivalent provincial regulation.

#### TAKING ACTION TO REDUCE GHG EMISSIONS

We are managing GHG emissions for the near, medium and long term. Near-term practices focus on:

**Compliance:** Many of our facilities are already required to reduce or offset their greenhouse gas emissions.

**Offsets:** We are investing in a portfolio of carbon offset projects and participating in the development of carbon markets to meet current and future requirements.

**Efficiency:** We seek continuous improvement in the efficiency of our power generation fleet.

**Renewables:** We are investing in the development of renewable power sources, including \$1.4 billion for the four wind projects currently in construction or advanced development, and early-stage development of new solar generation facilities.

To lay the groundwork for medium- and long-term transition to lower-emission and zero-emission technologies, we also pursue:

**Technology commercialization:** We invest in the development and commercialization of new technologies, including Front End Engineering Design work for the construction of both zero-emission and carbon capture technologies.

**Scientific and engineering research:** We support university scientists and engineers in both basic and applied research, including through our partnership in the University of Alberta's Canadian Centre for Clean Coal/Carbon and Mineral Processing Technologies.

#### 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.

In 2011, we participated in 20 meetings with DPOHs, primarily 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 in the jurisdictions where we operate.

We contributed no monies to Canadian federal parties in 2011 and 2010. Total expenditures on various political events and fundraisers across all provinces in Canada in 2011 were \$30,596 (compared to \$20,439 in 2010).

Details related to GHG regulation and climate change, including estimates of potential compliance costs, are included in our 2011 Annual Information Form.





## OUR EMISSIONS PROFILE:

To facilitate understanding of our emissions profile, it is best to first understand the fuel mix of our fleet. Solid fuel generation has significantly more emissions, and more types of emissions than natural gas, while hydro and wind are non-emitting. Moreover, how the facilities run, i.e., the generation output, is the most obvious determinant of emissions. With the divestiture of the Income L.P. assets – which included both natural gas and hydro facilities – the average intensities for most emissions was increased.

### ENERGY PRODUCTION AND EMISSIONS

#### EMISSION INTENSITIES<sup>1</sup>

	Oxides of nitrogen (kg/MWh)			Sulphur dioxide (kg/MWh)			Total particulate matter (kg/MWh)			Mercury (mg/MWh)			Greenhouse Gases (tonnes CO <sub>2</sub> E/MWh) <sup>2,3</sup>		
	2009	2010	2011	2009	2010	2011	2009	2010	2011	2009	2010	2011	2009	2010	2011
<b>Canada</b>	1.31	1.29	1.43	1.30	1.32	1.62	0.10	0.10	0.13	13.35	16.40	5.33	0.81	0.78	0.91
<b>U.S.</b>	0.18	0.24	0.34	0.29	0.45	0.57	0.03	0.03	0.02	0.75	1.64	2.42	0.31	0.33	0.42
<b>All</b>	<b>0.95</b>	<b>0.98</b>	<b>1.06</b>	<b>0.98</b>	<b>1.06</b>	<b>1.27</b>	<b>0.08</b>	<b>0.08</b>	<b>0.09</b>	<b>9.29</b>	<b>12.04</b>	<b>4.34</b>	<b>0.65</b>	<b>0.65</b>	<b>0.75</b>

<sup>1</sup> Emission intensities include only power generation operations. Emission 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.

<sup>2</sup> 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 emission totals and intensities.

<sup>3</sup> GHG emission intensities are stack emissions only, and do not reflect the impact of offsets.

#### TOTAL AIR EMISSIONS

	Oxides of nitrogen (tonnes)			Sulphur dioxide (tonnes)			Total particulate matter (tonnes)			Mercury (kg)			Greenhouse Gases (tonnes CO <sub>2</sub> E)		
	2009	2010	2011	2009	2010	2011	2009	2010	2011	2009	2010	2011	2009	2010	2011
<b>Canada</b>	16,300	16,400	15,100	16,100	16,700	17,100	1,300	1,250	1,350	165	208	56	10,029,000	9,915,000	9,626,000
<b>U.S.</b>	1,100	1,300	1,900	1,700	2,400	3,100	200	150	105	4	9	13	1,818,000	1,762,000	2,293,000
<b>All</b>	<b>17,400</b>	<b>17,700</b>	<b>17,000</b>	<b>17,800</b>	<b>19,100</b>	<b>20,200</b>	<b>1,500</b>	<b>1,400</b>	<b>1,455</b>	<b>169</b>	<b>217</b>	<b>69</b>	<b>11,847,000</b>	<b>11,677,000</b>	<b>11,919,000</b>

Values represent direct emissions from power generation operations.



# We manage our emissions.

## COMPLIANCE: OFFSETTING AND LICENSING

Across our North American operations, GHG emissions were 11.92 million tonnes (MT) in 2011, compared to 11.68 MT in 2010. Emission volumes and emission intensity were slightly higher than in 2010. This primarily reflects the reporting of emissions from three natural gas-fired facilities in New England, acquired in 2011, and our divestiture of CPILP, which included a number of biomass and hydro facilities that reported zero emissions in prior years.

We offset or licensed nearly 24% of our emissions by permanently retiring 760,286 tonnes of qualified, verified offsets, and acquiring 2,094,254 tonnes of emissions allowances – about the same as in 2010.<sup>1,2</sup> These offsets met our obligations under provincial and state regulations and licences.

Year-over-year changes in GHG emissions, emission intensity, and offsets are generally caused by:

- Changes in power production volume (the length of maintenance outages at thermal facilities can have a significant impact on single-year results from individual facilities);
- The introduction of new technologies that increase efficiency or decrease emissions;
- Changes in emission reduction or offset requirements; and
- Changes in our generating fleet (the development and acquisition of cleaner facilities add to emission volumes while decreasing emission intensity, while the addition of non-emitting sources leaves emission volumes unchanged and decrease emission intensity).



760,286 tonnes of Alberta GHG emissions were offset in 2011 to comply with provincial regulation and facility licence requirements.

### ALBERTA COMPLIANCE REQUIREMENTS

760,286 tonnes of Alberta GHG emissions were offset in 2011 to comply with provincial regulation and facility licence requirements.

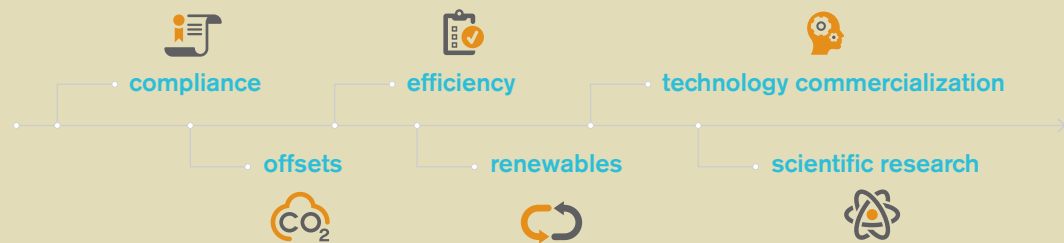
Our Alberta plants with GHG emissions greater than 100,000 tonnes of carbon dioxide (CO<sub>2</sub>) equivalent (CO<sub>2</sub>e) per year are subject to the Specified Gas Emitters Regulation (SGER) under the Climate Change and Emissions Management Act (Alberta). The SGER requires CO<sub>2</sub>e intensity be reduced by 12%, compared to the average emissions intensity from 2003-2005. There are three ways to comply with this requirement: make operational or plant changes that directly reduce facility emission intensity, apply GHG offsets created by qualifying Alberta-based projects, or make a payment into the Government of Alberta Climate Change Emission Management Fund (currently set at \$15 per tonne) for emissions in excess of the emission intensity target.

<sup>1</sup> See Report Scope at page 81 for an explanation of which facilities and offsets are included in these totals. For example, no emissions or offsets are included with respect to Capital Power's 50% ownership interest in Keephills 3 because Capital Power does hold the operating permit; however, 100% of emissions and offsets are included from Genesee 3, where Capital Power is the operator, despite Capital Power owning only 50% of Genesee 3. This approach also aligns with Canadian federal reporting requirements, where operators report 100% of facility emissions rather than emissions based on their proportional ownership interest.

<sup>2</sup> For 2011, offsets by facility and compliance regime were Genesee 3 SGER: 42,956 (11,094 in 2010); Genesee 3 Natural Gas Combined Cycle (NGCC): 703,841 (735,153 in 2010); Genesee 1 and 2 SGER: 13,489 (10,111 in 2010); New England facilities under Regional Greenhouse Gas Initiative (RGGI): 2,096,254 (2,102,370 in 2010).



## INVESTING IN IMMEDIATE AND LONG-TERM GHG REDUCTION THROUGH:



We have retired 100% of our annual SGER obligation through the use of offsets since 2008. The 2011 increase in emission offset retirements is attributed to the increasing obligation on Genesee 3, which had a 6% target in 2011 and is increasing by 2% each year until it reaches the SGER target of 12%.

Genesee 3 was subject to GHG reduction targets under the SGER (following a three-year grace period) starting in 2009 at 2% and increasing at a rate of 2% per year to a maximum of 12%. In 2011, under the SGER, Genesee 3 is now subject to a CO<sub>2</sub>e intensity reduction target of 6%.

In addition to the SGER, we are also required to reduce our share of Genesee 3's GHG emissions by approximately 53% under Clause 10 of the Energy Utilities Board (now Alberta Utilities Commission) (EUB) Decision 2001-111 (NGCC offsets). This requirement makes net GHG emissions from Genesee 3 equivalent to a natural gas combined-cycle plant. Offsets have been retired every year since Genesee 3 was commissioned and will continue to be retired to meet future obligations.

### U.S. Compliance Requirements

Our facilities in Connecticut, Maine, and Rhode Island are subject to the Regional Greenhouse Gas Initiative (RGGI). RGGI is a co-operative effort by nine states that have capped CO<sub>2</sub> emissions from the power sector and mandated an emissions reduction of 10% by 2018. A limited number of allowances are available for purchase each year, and facilities are required to hold sufficient allowances to equal their CO<sub>2</sub> emissions over a three-year control period. Facilities may also meet a portion of their requirement by applying certified offsets from qualifying GHG-reduction projects that are located within one of the RGGI states.

To date, our New England assets have complied with the RGGI regulations through the purchase of emission allowances through auctions. In 2011, we applied 2,096,254 tonnes of CO<sub>2</sub> emissions allowances to meet the regulated reduction requirements at these facilities.

### Leading Emission Offset Practices

We have been acquiring offsets for almost a decade and have entered into more than 35 offset purchase agreements. Approximately \$16 million was invested in offsets in 2011, about the same as our investment in 2010.

We have expertise in the origination, purchase, and sale of verified emission offsets. We also developed two of the Alberta Offset System Quantification Protocols.

Our early, active and responsible participation in emission offset practices has delivered more than 4.2 million tonnes of Alberta SGER offsets since 2007, and approximately 4 million Natural Gas Combined Cycle (NGCC) offsets from 2007 to 2011. Emission offsets are audited and verified by independent third parties.

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 also an active member of the International Emissions Trading Association and an executive member of the Industry Provincial Offsets Group.





We achieved a 63% decrease  
in mercury emissions  
compared to 2010.

We have purchased offsets from a variety of Alberta and CRT projects in 2011. Some of these project types include composting, ozone depleting substances, forestry, agricultural methane, no-tillage agriculture and landfill gas.

#### MORE INFORMATION ON OUR STRATEGIES FOR REDUCING GREENHOUSE GAS EMISSIONS

Other ways by which we are reducing GHG emissions include:

- Energy efficiency at our operations;
- Investments in renewable power, including a \$1.4 billion commitment to four wind projects (read about our Quality Wind project on page 32); and
- Investments in technology commercialization, such as our 2011 completion of Front End Engineering Design work for carbon capture and storage (page 53).

#### DECREASE IN MERCURY EMISSIONS

In 2011, Genesee Units 1, 2 and 3 began use of an Activated Carbon Injection (ACI) system to lower

mercury concentration in flue gas emissions. We achieved a 63% decrease in mercury emissions compared to 2010. Both Genesee stacks were above a 74% capture rate by the end of 2011. We will continue to monitor and adjust injection rates to meet future targets.

The successful 2011 results are the culmination of eight years of study and tests.

The challenge is that mercury molecules make up a tiny proportion of a coal generator's flue gas. Capturing them is like filling a hockey arena with ping-pong balls and trying to remove 25 red ones then repeating the process a fraction of a second later, continually.

A significant amount of research and experimentation was required before arriving at ACI as a solution, and even then technical hurdles had to be overcome. The mercury reduction project at Genesee drew upon a wide variety of disciplines, including Operations, Engineering, Commercial, Tax and Environment.

#### THERMAL EFFICIENCY FROM FOSSIL-FUEL FACILITIES

Genesee 1 & 2 (subcritical coal)	33.6%
Genesee 3 (supercritical coal)	39.0%
Bridgeport (combined cycle)	47.6%
Tiverton (combined cycle)	46.5%
Rumford (combined cycle)	44.5%
Island Generation (combined cycle)	47.2%
Clover Bar Energy Centre (simple cycle)	36.5%

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 average thermal efficiency for our gas plants is 46% and 36% for our three coal units at our Genesee facility. A report<sup>(1)</sup> by the National Energy Technology Laboratory in the U.S., which falls under the Department of Energy, cited an average efficiency of 32.5% in 2009.

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



#### GREENHOUSE GAS EMISSIONS AND INTENSITY FROM FOSSIL FUEL FACILITIES

greenhouse gases (tonnes CO<sub>2</sub>E)

2009	11,576,000
2010	11,320,000
2011	11,471,000

net production (MWh)

2009	16,372,000
2010	15,777,000
2011	14,372,000

fossil-fuel emission intensity (tonnes CO<sub>2</sub>E/MWh)

▲ 0.78 ▲ 0.72 (2010)  
0.71 (2009)





## RESEARCHING TECHNOLOGY FOR A CLEANER FUTURE

We supported clean power research and initiatives through our involvement with the Centre for Clean Coal/Carbon and Mineral Processing Technologies, a \$21-million teaching and research centre at the University of Alberta's Faculty of Engineering.

We completed groundbreaking research and design for an Integrated Gasification Combined-Cycle facility with carbon capture and storage and found that the technology works, although the economics are not favourable at this time. Capital Power and the Governments of Canada and Alberta each contributed \$11 million to the multi-year research project.

### ASSISTANCE FROM GOVERNMENT

We continued to work with TransAlta, Enbridge and the federal and provincial governments to explore carbon capture and storage technology. An extensive engineering and design study showed that it is technically feasible, but it would not be prudent to proceed at this time.

We also continue exploring options for near-zero emissions coal power technology, including synthetic gas technology (in-situ coal gasification) through our involvement with the Canadian Clean Power Coalition.



# We monitor for long-term effects in air, land, water, fish & wildlife.

Long-term monitoring allows us to gauge any long-term environmental effects from our facilities.



## MILLER CREEK BIOMONITORING PROGRAM

The five-year biomonitoring program for the Miller Creek run-of-river hydroelectric plant was initiated in 2009 at the direction of the British Columbia Ministry of Environment.

The biomonitoring evaluates the long-term environmental impacts of the facility. These studies and three-year results to date include:

- 1 Mitigation and restoration monitoring to evaluate slope stabilization and culvert maintenance** on the access road. Steep road cuts deposit sediment into the river, which can have a harmful effect on fish. Willow and other plantings and wattle fences (woven willow fences) have reduced the number of areas on the road with erosional control issues – from 15 in 2009 to three in 2011.
- 2 Harlequin duck surveys to assess if ducks are utilizing suitable habitat** in the areas influenced by plant operations. Harlequin ducks are a species of conservation concern. During the 2011 nesting season, a Harlequin duck female and juvenile were observed in the South Miller Creek headpond, indicating successful nesting and breeding.
- 3 Wildlife observations to assess the species of wildlife in the Miller Creek area.** A total of 31 observations were made, including a flock of band-tailed pigeons and a wolverine, both of which are species at risk.
- 4 Bull trout surveys to determine if a significant population lives and spawns in Miller Creek.** This “blue listed” species is found downstream of the plant. Fish can be affected by rapidly changing river levels. To date, a small number of bull trout have been caught and released in these studies. All were below spawning size.
- 5 Ongoing water quality studies to determine the effect of plant operations on the temperature, content of dissolved oxygen, and the chemistry of water returned to the river.** Maintaining these parameters within specific limits is important to aquatic life.
- 6 Invertebrate sampling to determine if the type, abundance and distribution change over the five-year monitoring period.** Invertebrates are food sources for fish and other organisms, including Harlequin ducks.
- 7 Hydrology, ramping and flow monitoring.** The plant is obligated to maintain a minimum flow through the natural channel according to the plant’s water licence. We are not allowed to

divert the entire flow of the creek at either the North or South Miller intakes. This instream flow release (IFR) is monitored by hydrometric gauges that transmit the water level via satellite to an independent biomonitoring company. We are alerted if the flow is below the IFR, and we must make the required changes to bring the IFR into compliance. The gauges were installed in August 2011, and it was determined that the South Miller IFR was below the water licence requirement. The appropriate operational changes were made to bring the IFR into compliance.

In 2011, hydrometric gauges were installed in areas of Miller Creek where the water level changes indicate flow ramping happening too quickly for the young fish to escape the shallow river margins. If a ramping event exceeds the recommended guideline, biomonitors are dispatched to search the specified area and the live fish are rescued. The event, including the total of stranded and isolated fish, is reported to the appropriate regulatory authorities.

In 2011, there were five recorded ramping events that were “searched”, but no stranded or isolated fish were found.

Reference: Lewis, A., K. Ganshorn, I. Mencke, A. Newbury, V. Woodruff, A. Yeomans-Routledge and C. Zyla. 2012. Miller Creek Hydroelectric Generating Station Renewed Monitoring Program – Year 3 Report, Final Report. Consultant’s Report prepared for Capital Power Corporation by Ecofish Research Ltd., March 28, 2012.





The results collected in the past seven years show no appreciable trends associated with contaminant concentrations in the majority of the sampled media across all of the sampling locations.

Genesee Wabamun region

## GENESEE REGION BIOMONITORING PROGRAM

### One of the Largest Biomonitoring Projects in North America Completes Seventh Year

The environmental biomonitoring in the Genesee Wabamun region in west-central Alberta determines what environmental impacts, if any, have occurred as a result of increased power generation. We have been working with the TransAlta Generation Partnership (TGP) on this comprehensive biomonitoring program since 2004.

The results collected in the past seven years show no appreciable trends associated with contaminant concentrations in the majority of the sampled media across all of the sampling locations.

The biomonitoring program measures and assesses potential changes in environmental concentrations of several chemicals of potential concern (COPC) associated with aerial and water emissions from the generating plants, in addition to the monitoring of wildlife populations and habitat. The program uses ten designated terrestrial sampling locations across the geographic area, four air monitoring stations, and obtains surface water samples from three local lakes, the cooling ponds and three locations on the North Saskatchewan River.

The COPC chosen for this biomonitoring program are relatively stable, have the potential to accumulate, and are measurable in environmental media, such as water, soil, sediment and biota, and include arsenic, barium, cadmium, lead, manganese, mercury and selenium.

Results of air monitoring of power plant emissions, including nitrogen dioxide, sulphur dioxide, PM2.5, ozone and mercury, are monitored through an Acid Deposition, a Mercury Assessment and an Ambient Air Monitoring Program.

### Monitoring Mercury

We have been working with the Mercury Deposition Network of North America in establishing one of only two mercury wet deposition monitors in Alberta at the Genesee Air Monitoring Station. We have also worked with Environment Canada to reconstruct a multi-species mercury deposition assessment.

Expert environmental consultants complete routine monitoring of environmental media, including air, soil, vegetation, small mammals, fish, lake and river water, groundwater, sediment and benthic invertebrates.

### Wildlife Surveys

Wildlife biologists survey local bird, ungulate, and amphibian populations. Specific programs have also been designed for the sampling of traditionally used vegetation, the monitoring of peregrine falcons and rare mosses and lichens.

The results of all sampling and monitoring are submitted to Alberta Environment, and the results of the Ambient Air Monitoring Program are posted on the website of the West Central Airshed Society.

We continue working with regulators to maximize the scientific impact of this extensive biomonitoring program.







2,030

APPROXIMATELY 2,030 CATTLE BELONGING TO 12 LOCAL FARMERS POPULATED THE COMMUNITY PASTURE AT GENESSEE.

# We respect the land.

## INNOVATIVE LAND RECLAMATION

We protect and enhance biodiversity by diversifying natural landscapes in ways that can sustain multiple land uses, such as wetlands, cattle and farming.

Land in the Genesee area is primarily farmland and, as such, reclamation efforts over the past 25 years have primarily focused on reclaiming mined land back into farmland. In recent years, reclamation efforts and research have also included reforestation techniques and wetland development. This helps create a balance and diversity of landscape and land uses, and provides habitat for the many species that populate the area.

### RECLAMATION HIGHLIGHTS

In 2011, two species of trees were planted at Genesee, creating a mixed wood forest. Approximately 30,000 white spruce were planted into an aging boreal forest dominated by aspen.

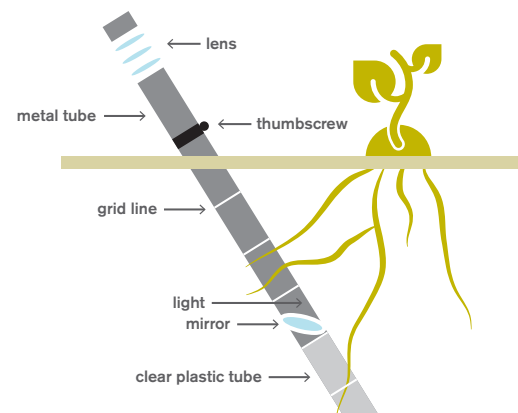
The spruce was planted into the understory and, as the aspen die out, the forest floor will receive more sunlight allowing the spruce to thrive. Over the long term, a robust spruce stand along with native aspen will become established.

A variety of hybrid poplar called Okaneese was planted on 13 hectares in the Genesee Mine for shelterbelt and reforestation purposes.

### FUNDING RESEARCH

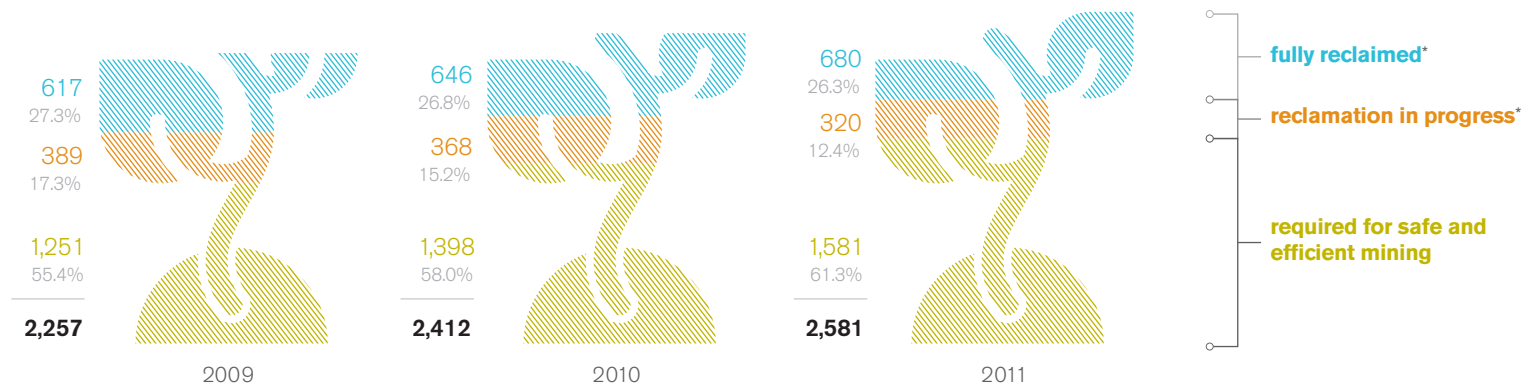
We continued our partnership with Syncrude, Suncor, Shell and Natural Sciences and Engineering Research Council (NSERC) to fund a University of Alberta aspen tree research project. Under Dr. Simon Landhausser's direction, two students completed and defended their master's theses. Dr. Landhausser's work is on the live root transfer aspect and the study of tree root growth in relation to hardpan continued in 2011. (Hardpan is the hardened layer of soil beneath the topsoil, which is compacted from the mining trucks during reclamation.) The study will determine if the aspen roots can penetrate this layer to get to the nutrients

### ROOT RIZOMETRES





## GENESEE MINE AREA & RECLAMATION SUMMARY (HECTARES)



\* Fully reclaimed refers to land that is fully certified and to land parcels that have been applied for and awaiting final certification from Alberta Environment. Reclamation in progress means reclamation activities are started but not finished – no application certification has been filed.

and moisture they need to survive. Root rizometres (see diagram on previous page) were installed and aspen trees will be planted in 2012 in the research plot.

### FARMING ON RECLAIMED LAND

Approximately 2,030 cattle belonging to 12 local farmers populated the community pasture at Genesee in 2011.

Land reclaimed for agricultural purposes allows local farmers to bring their cattle to a well-managed grassland operated by professional range managers.

Native tree stands were protected from grazing cattle through the installation of cattle fences on approximately 256 acres of land.

Data collected from wildlife surveys by biologists compared the ungulate populations at Genesee to the surrounding Provincial Wildlife Management Units. The deer, elk and moose populations were found to be at comparable levels to those elsewhere in the region.

### MAN-MADE WETLAND

Initial steps were taken to create a man-made wetland in the reclaimed areas of the mine. Initial grading and site preparation was carried out. This project will be a template for future wetland creation at Genesee.



Reclamation research at Genesee includes reforestation techniques and development of wetlands.







# We respect biodiversity.

## PEREGRINE FALCON LOVE TRIANGLE

The resident peregrine falcons returned to the Genesee facility in 2011. After providing two years of tracking data, the resident male falcon had its satellite transmitter removed. The female laid four eggs. Two were fertilized and one hatched in early June. The young flew from the nest about 38 to 45 days later.

It was observed that the returning male was incubating and caring for eggs that the female produced with a younger and smaller male earlier in the spring. Biologists discovered that the resident male is likely the son of a large male who frequented the Genesee area during the 1970s.

The peregrine falcons can be followed live on our Genesee "falcon cam" at [www.capitalpower.com](http://www.capitalpower.com).



## WALLEYE TRANSFER PROJECT

A quantity of walleye was captured from the Genesee Cooling Pond and transferred to nearby Lake Wabamun, a popular recreational lake west of Edmonton, Alberta.

The project was carried out with Alberta Fish and Wildlife, who are re-introducing the predatory fish to Lake Wabamun to improve its ecosystem as part of a six-year project.

## WILDLIFE MONITORING

We monitor wildlife species composition and relative abundance, including species of management concern in order to assist us in responsible management of lands. Our operations do not affect any wildlife on the International Union for Conservation of Nature and Natural Resources Red List species list.

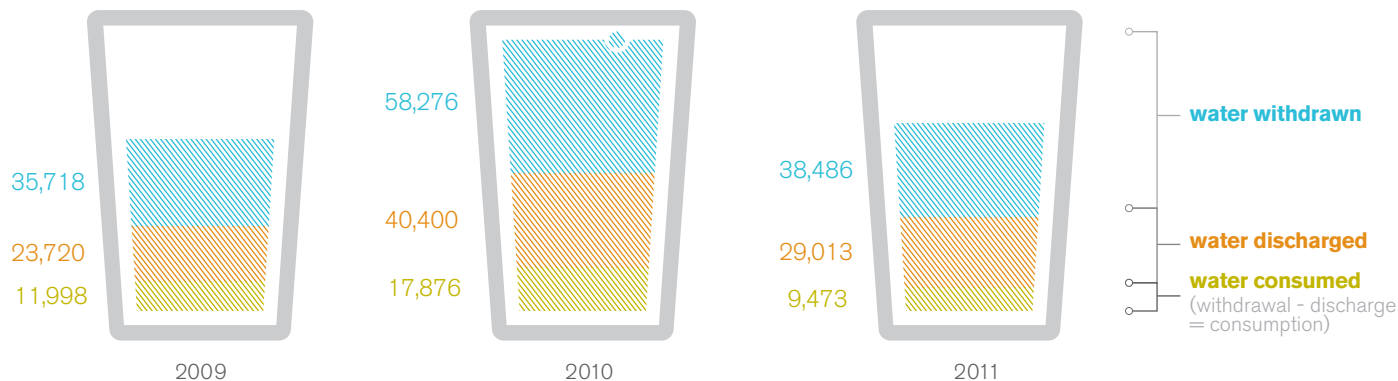
Surveys conducted between 2004 and 2010 have identified 25 wildlife species of management concern in the Genesee area. This group consists of eight species of water birds, seven species of raptors, eight species of perching birds, one amphibian and one mammal species. We are using this data to protect sensitive habitat areas and to plan for the creation of suitable habitat post-mining.

## TREE CLEARING IN ADVANCE OF MINING

In preparation for the topsoil salvaging of 65.6 hectares of land, a tree logging contractor was given access to lands owned by Capital Power. The contractor was able to salvage 4,002 tonnes of deciduous trees, which were hauled to the pulp mill nearby Athabasca, Alberta. This relationship with the forest industry ensures that valuable wood fibre is not wasted.



# APPROXIMATE WATER WITHDRAWALS AND DISCHARGES (MEGALITRES)



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

## We use water responsibly.

### WATER USE DECREASES

Water is used at our generation facilities for making steam and for cooling. Our steam systems are primarily close-looped, i.e., the water is heated into steam and then condensed back into water and reused. Cooling systems are similar but may draw from an external source and discharge back to that source. Some water is lost in the process, through evaporation into the atmosphere.

Our most significant water use occurs at the Genesee facility. More than 90% of the water use is drawn from the North Saskatchewan River and more than three-quarters is returned back to the

river. Our other facilities draw water for cooling and then return it to the original source. Water sources for other facilities include groundwater, municipal water and recycled water. These facilities return water to their source in relatively the same quantity and quality as was taken.

We are a member of 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, in a way that balances environmental, social and economic needs.

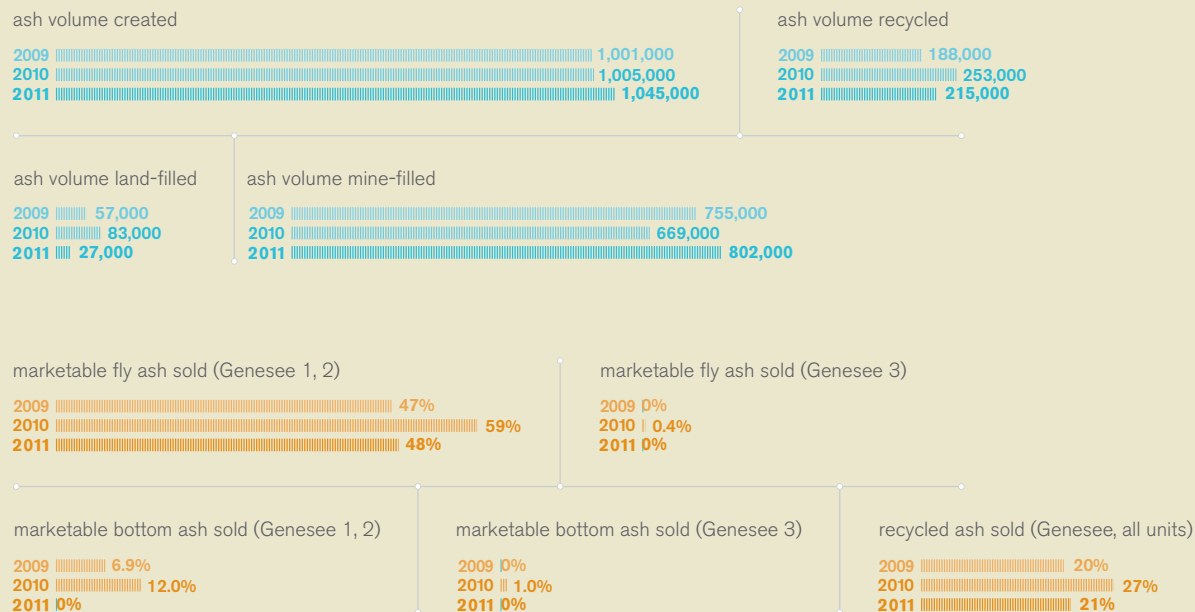
### WATER WITHDRAWALS FOR PLANT OPERATIONS

Our water consumption decreased in 2011 for three main reasons:

- 1 Water consumption at Genesee was lower in 2011. Withdrawals were higher than normal in 2010 due to successful efforts to improve water quality in the Genesee Cooling Pond.
- 2 Decrease in water consumption at the Clover Bar Energy Centre.
- 3 Divestiture of the CPILP facilities.



## ASH RECYCLING AND DISPOSAL (tonnes)



### RECYCLING FLY ASH AT GENESEE

Ash is produced as a byproduct from Genesee, Roxboro and Southport. In 2011, the amount of ash produced increased slightly due to the high plant availabilities and a change in the fuel mix at the Roxboro and Southport facilities to a mix of biomass, tire-derived and coal fuels.

At Genesee, approximately 50% of the fly ash captured from Units 1 and 2 was sold to concrete companies to use in cement production across western North America.

In 2011, although we found that Genesee 3 fly ash works well as a soil cementing product, no fly ash was sold from the unit. Demand was constrained due to the exceptionally wet spring and summer, which prevented the soil cementing projects from proceeding.

With ambitious growth targets in 2012, we aim to sell 75% of the fly ash from Units 1 and 2 and 16,000 tonnes of Genesee 3 ash for soil cementing projects.





## REPORTABLE ENVIRONMENTAL INCIDENTS



- 1 Regulatory infractions are incidents that contravene a regulation or other applicable law, a site permit/licence or site operating approval.
- 2 Incidents that are administrative in nature such as late report submissions, lapsed certifications, or failures to report.
- 3 No spill occurred. A near miss incident with an ammonia tank was classified as a reportable incident because of the potential for injury and environmental damage.
- 4 Public Complaint incidents are those that are attributable to Capital Power operations.
- \* Data is for the second half of 2009 only, following Capital Power's Initial Public Offering in July 2009.

### OZONE-DEPLETING SUBSTANCES

No ozone-depleting substances were released in 2011.

### HAZARDOUS WASTE

We did not transport hazardous waste in 2011.

### 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 31 reportable environmental incidents in 2011. No environmental fines were received in 2011.





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





# PEOPLE

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



PASSIONATE ABOUT ACHIEVING OUR VISION

"We have been able to successfully deliver on our strategy because of the passion and commitment of our people. This is what will drive our success in the future."

Brian Vaasjo, President and CEO

# WORKFORCE

RETIREMENT:

3.7%  
ELIGIBLE  
IN THE NEXT  
5 YEARS  
ELIGIBLE  
IN THE NEXT  
10 YEARS 12.8%

20 TEMPORARY  
FULL-/PART-TIME  
PERMANENT  
878 FULL-TIME  
PERMANENT  
PART-TIME  
14

13,500 VOLUNTEER  
HOURS

NEW HIRES:

94 (66%)  
WOMEN  
49 (34%)  
MEN  
28 (20%)  
UNITED STATES  
115 (80%)  
CANADA  
79 (55%)  
UNDER  
35  
50-PLUS  
24 (17%)  
35-49  
40 (28%)



TOTAL NUMBER  
OF EMPLOYEES  
COMPANY-WIDE

892



# GENDER DIVERSITY

892  
EMPLOYEES



724 employees in Canada



168 employees in United States



643 (72%)  
male employees



(28%) 249  
female employees

## MANAGEMENT

Canada

(26%) 44  
women in management

(74%) 126  
men in management



170



25

United States

3 (12%)  
women in management

22 (88%)  
men in management

upper management  
(\$93 earned per \$100 earned by men)

28 4

mid-level management  
(\$88 earned per \$100 earned by men)

70 19

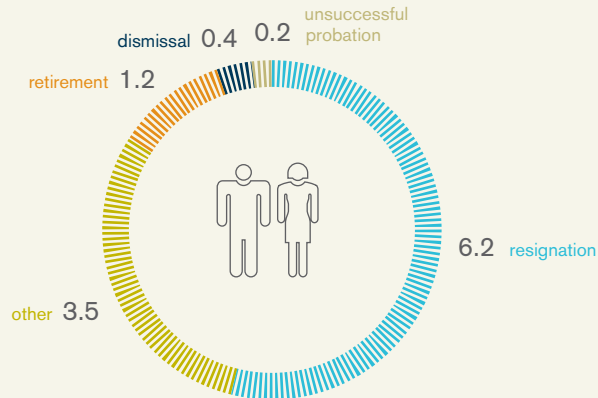
entry-level management  
(\$84 earned per \$100 earned by men)

50 24



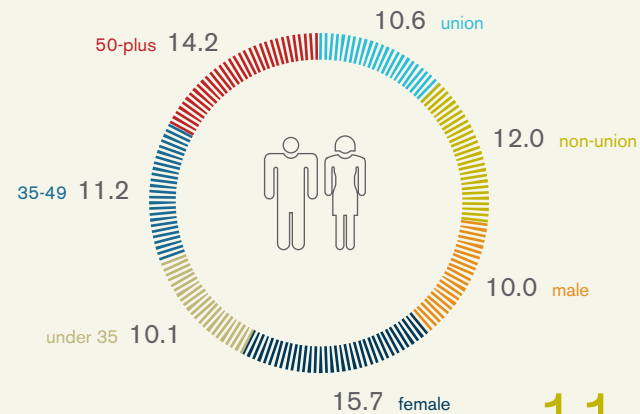


## EMPLOYEE TURNOVER REASON (%)



Employee turnover reason shows the contribution of each cause of turnover to the overall turnover rate on an additive basis. The employee turnover rate shows turnover rates within different segments of employees.

## EMPLOYEE TURNOVER RATE (%)



11.5%

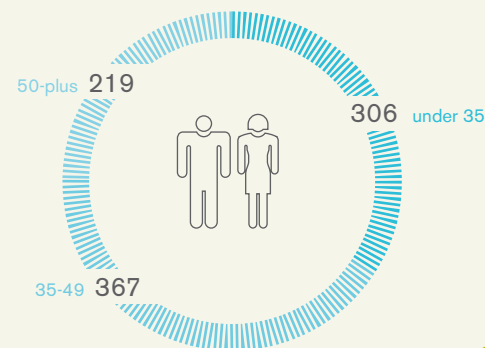
2011 COMPANY-WIDE TURNOVER RATE



13,500

number of hours that 82 employees reported volunteering in their communities

## AGE OF EMPLOYEES



<2.7%

RATE OF ABSENTEEISM IN ALL REGIONS

DUSTY SCHLITZER, GENESEE, AB

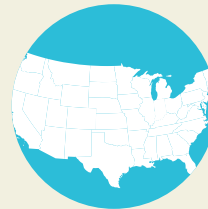


## PENSIONS AND BENEFITS

**12.66%\***  
employees accessing  
Employee and Family  
Assistance Program (EFAP)

**273**  
employees who are  
members of registered  
defined contribution plan

**446**  
employees who are  
members of Local Authority  
Pension Plan (LAPP)



**136**  
employees who are  
members of registered  
defined contribution plan

**446**

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

## WAGE COMPARISONS

**100%**  
% workforce paid more than minimum wage  
(national) Canada and the United States

**\$11.01**  
difference between Capital Power's  
lowest starting wage and local minimum wage (Alberta)

**3**  
number of employees earning  
lowest starting wage (national)

**2** **1**

**\$137** MILLION\*  
EMPLOYEE WAGES AND BENEFITS

\* \$137 million excludes \$18 million in share-based equity payments and pension amounts, which are shown on page 45.





“At Capital Power, we have an extremely strong ethical base – and it reflects transparency, honesty, and always doing the right thing.”

Brian Vaasjo, President and CEO

# We are committed to being an ethical company.

## ETHICS AND INTEGRITY

Guided by our corporate values, we stand behind our word, we openly report on our performance, and we treat our employees and neighbours with respect. All employees received training on our Ethics Policy in 2011.

All new employees are also trained and required to sign the Ethics 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](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 encouraged to raise potential violations with their manager or any member of senior management. They may also anonymously report a concern by contacting the company's Integrity Hotline, which operates 24 hours, seven days a week and is staffed by an independent third party under strict confidentiality obligations.

In 2011, we received four inquiries or concerns raised by employees involving our Respectful Workplace. All of these inquiries were investigated promptly and have been resolved, with appropriate action being taken.



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.





**We are guided  
by our values.**







# We have positive relations with our unions.

## COLLECTIVE AGREEMENTS

We have positive work relations with five labour unions (four Canadian and one American), which together represent approximately 32% of Capital Power's labour force. In Canada, this represents approximately 38% of our overall workforce and 8% of our overall workforce in the United States.

We have had no labour disruptions or work stoppages at Capital Power since 1978. In 2011, 13 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.

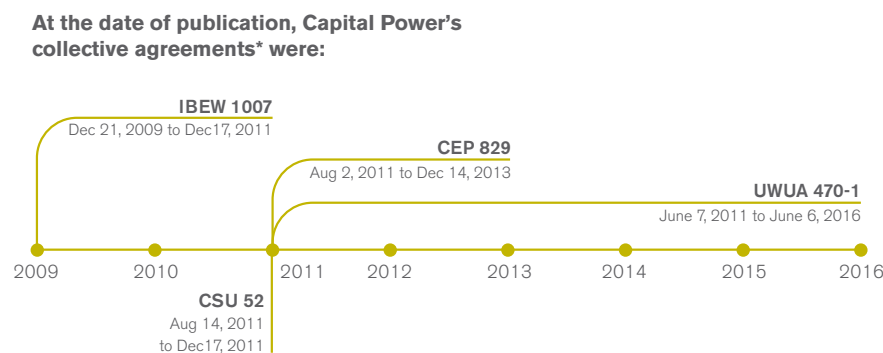
Outside of Alberta, we have agreements with two unions: the Communication, Energy and Paperworkers (CEP) Union of Canada Local 1123 in Campbell River, British Columbia; and the United Workers Union of America (UWUA) Local 470-1 in Bridgeport, Connecticut.

In 2012, Capital Power will be collective bargaining three new collective agreements:

- CSU 52 – Edmonton, Alberta
- IBEW 1007 – (Genesee ) Warburg, Alberta
- CEP 1123 – Campbell River, British Columbia

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.

Further information about our collective agreements can be found in our AIF at [www.sedar.com](http://www.sedar.com).



\* Capital Power has not previously bargained with CEP 1123. The Union relationship with CEP 1123 began as a result of the acquisition of Island Generation in 2010.





We are committed  
to ongoing training.





“Capital Power is my fourth company and this is by far the best orientation I've ever been on.” **Shereen Lewis, participant in Strong Start**

## SUPPORTING, TRAINING AND MENTORING

In a complex business and growing company, we rely on the skills, talents, and experience of our people. A commitment to ongoing training and a passion for learning is key. When we find the right people, we want them to stay.

### CONTINUOUS DEVELOPMENT

Investing in people by providing the best training, resources, and development opportunities is a critical part of our human resources strategy. We aim to help our people be fully engaged, productive, and satisfied with their day-to-day work and career potential.

We strive to create a culture that promotes continual learning and personal development.

From technical training to personal development, we provide a number of programs and tools to help employees excel.

### CAPITAL POWER SCHOOL OF BUSINESS

Capital Power School of Business is a foundational initiative for a strong learning and development culture. Core programs and courses such as leadership development and professional business skills are offered.

### Strong Start Orientation & On-boarding Program

Our interactive Strong Start orientation and on-boarding program welcomes new employees and gives them a foot forward in their first 100 days of employment. New employees are required to complete an online e-learning course within their first week of employment and then attend a 1½-day classroom orientation session and a tour of the Genesee plant.

In 2011, 149 employees completed the web-based Strong Start e-learning modules. Six classroom sessions were held throughout the year with a total of 82 participants.

When our New England facilities became part of Capital Power, additional classroom sessions were held at each of the three plants. More than 66 additional employees participated.

### Self-development

The After Hours Personal Development Program helps employees to fund their certificates, diplomas and degrees, or individual courses. We provide up to \$3,000 per year for full-time employees and \$1,500 per year for part-time permanent employees.

In 2011, 42 employees took advantage of after-hours learning opportunities with reimbursements totalling more than \$52,800.

### 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.



## STEPS AHEAD ON TRAINING

"The iLead program focuses on developing the talent at Capital Power and maximizing the value of the resources that we already have. We've got a lot of people who are very strong at what they do and a lot of potential leadership in the various groups. The biggest thing that stood out for me was the focus on integrity. Obviously, that's one of our core values but it was good to see that was wrapped in and implemented in a form that employees can use on an everyday basis."

**Matt Davies, Senior Advisor, Compliance and Training**



## Developing Executive and High-potential Talent – iLead Program

Our executive development program is designed to build a talent pipeline for senior leadership roles. Candidates are nominated by their manager, through the company's succession planning process, and/or have identified leadership development as a learning objective on their customized individual development plan.

The custom iLead Leadership Development Program builds our competitive advantage by establishing a rich, broad, bench strength around the theory and practice of leadership.

Three sessions (two were pilots) of the iLead program were held in 2011, with a total of 25 managers attending.





"We have excellent, talented women in our organization, and female mentorship is a great form of support, particularly in a male-dominated field. From being a mentor previously, I received feedback that the mentees found enormous value in being able to discuss issues, such as work-life balance and career development, in a non-threatening, open and supportive environment with senior women who have already been there. I wanted that experience for others in our company."

Kate Chisholm, founder and champion of the MORE program and Capital Power's Senior Vice President, Legal, Regulatory & Government Affairs

Through four distinct courses, iLead offers an interactive learning opportunity for leaders to share learning, insights, and grow with others in a similar role.

- 1 iLead\_boot camp** This series is designed to help a new leader navigate through the procedures, policies and information specific to managing at Capital Power. Leaders will gain an understanding of their responsibilities related to Capital Power's mission, vision and values, finance, administration, information technology and human resources. The goal of this series is to provide leaders with the information, tools and resources they need to become more independent, effective and efficient as a new manager.
- 2 iLead\_core** Leaders gain insights into what leadership means at Capital Power and practise core leadership skills (coaching, resolving conflict, delegating, motivating and adaptive leadership) in a highly interactive environment.

- 3 iLead\_evolve** Leaders learn the critical skills (mastering emotional intelligence, making change happen, cultivating partnerships, influencing organizational impact, developmental organizational talent and handling challenging situations with courage) required to deliver on our business strategy and drive the success of Capital Power.
- 4 iLead\_refine** Our senior leaders face a complex array of responsibilities and their job is to look into the future and see Capital Power, not as it is today but as it could be. This learning experience will help our leaders to refine their strategic leadership skills through the latest thought leadership, best practices, case studies and personal insight (self-assessment tools).

## MORE: MENTORSHIP SUPPORTING WOMEN TO SUCCEED

KATE CHISHOLM

Developed by Capital Power, the MORE program (Mentoring, Opportunities & Real Experience) emerged to inspire up-and-coming professional women in Edmonton, Alberta by connecting them with some of the most successful women in the city's business community. In the true spirit of collaboration, Capital Power joined with four other companies to inspire young professionals by providing individual mentorship relationships and five interactive group sessions for both mentees and mentors throughout the year.





## 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).

# BENEFIT PROGRAMS

We provide employees with a benefit package that includes health and wellness, family-friendly benefits, retirement and savings plans and educational support.

## Health and Welfare

Program elements are reviewed regularly and customized by region to ensure they are competitive and typical of the regions in which we operate. Coverage includes medical, dental and vision care for employees and their families and income protection in the form of short- and long-term disability for employees. A basic amount of life insurance is provided for all employees, with the option to increase coverage for themselves and their dependants. Health spending, health reimbursement, and flexible spending accounts provide flexibility and allow employees to make tax-effective choices.

We also communicated regularly on health and safety well-being. Topics included best practices for safely shoveling snow and cutting grass, staying healthy in flu season and responsible driving. Annually, we coordinate a blood donor drive at our head office, promoting the importance of saving a life.

## Retirement Savings Plans

We offer a variety of retirement and savings plans. Depending on eligibility (e.g. permanent versus temporary or union versus non-union employees) and location, employees participate in pension, 401(k), and registered and non-registered savings plans. Educational resources are also available, including advice from external investment advisors.

## Paid Time Off

We believe in work-life balance and encourage employees to take time away from the workplace. Employees are offered various paid-time-off options based on eligibility and region. Paid holidays, personal leave days, paid time off, vacation and scheduled days off allow for flexibility in their time away from work.

## Free Flu Shots and Clinics



We provided Alberta-based employees and their dependants with free immunization for seasonal flu in 2011.

## RECOGNITION

### Milestone Achievement Award Program

We recognize employees for their achievements and contributions as they reach milestone years in their careers.

## INCENTIVE PAY



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.

For more information on our compensation philosophy and programs, see the 2012 Capital Power Corporation Management Proxy Circular available at [www.capitalpower.com](http://www.capitalpower.com).

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





“For me, this has been a dream job.”

“I’ve gotten to do all kinds of different things and put to use a lot of the skills I’ve learned since graduating from engineering school.”

Sandy Fleming, Project Engineer, Capital Power





# 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 to this date of publication in 2012, Capital Power was governed by a Board of 12 directors, ten of whom are independent, for the purposes of National Instrument 58-101 – Disclosure of Corporate Governance Practices (NI 58-101).

## Board Responsibilities

The Board of Directors (Board) is responsible for the stewardship of Capital Power, providing independent, effective leadership to supervise the management of our business and affairs and to grow value responsibly, in a profitable and sustainable manner. The Board has the responsibility to:

- Supervise the management of the affairs of the Board by establishing committees to provide more detailed review of important areas of responsibility, delegating certain of its authorities to management, reserving certain powers to itself and making certain recommendations to the shareholders.
- Participate with management in the development and adoption of our strategic planning process, approve annual capital and operating budgets, and monitor progress towards company goals and alter its direction through management in light of changing circumstances.

- Approve the appointment, termination, succession and remuneration of the Chief Executive Officer (CEO), ensure succession planning programs are in place for senior management, and approve certain matters relating to all employees.
- Monitor corporate financial performance against the operating and capital plans and ensure management identifies the principal risks of our business and implements appropriate risk management and management control systems.
- Oversee the review to ensure the implementation and integrity of our internal control and management information systems.
- Approve annual and quarterly financial statements, declare dividends, and approve debt financing, insurance coverage, commitments and commencement or settlement of litigation.
- Ensure effective communication, including financial performance, with shareholders and major stakeholders.
- Approve and monitor compliance with all significant policies and procedures by which we operate.

The full terms of reference for the Board are available in Appendix A of our 2012 Management Proxy Circular. Corporate Governance Disclosure is in Appendix B. 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;
- National 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. In 2011, 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 2011. The Board comprised 11 men and one woman. All directors were more than 50 years old while none were visible minorities.

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.





RICHARD CRUICKSHANK, DIRECTOR



HUGH BOLTON, DIRECTOR

### Board Structure

The four standing committees of the Board include the following:

- Audit Committee;
- Corporate Governance, Compensation and Nominating Committee;
- Environment, Health and Safety Committee; and
- Keephills 3 Project Oversight Committee which ceased to exist as a committee on November 23, 2011.

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

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

### 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 as disclosed in the 2012 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 we place on aligning directors' compensation with the interests of shareholders.

Directors receive 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.

### Processes for Evaluating Performance

Our Board of Directors has developed clear position descriptions for each of the Chair, Non-EPCOR Elect Chair, Chairs of each committee and CEO. There is a comprehensive orientation process for new Board members and an ongoing continuing education program for existing Board members. Our Board has adopted a written code of business conduct and ethics, and is responsible for monitoring compliance with it. A skills matrix to outline what competencies and skills the Board as a whole should possess has been developed and adopted and is reviewed regularly for purposes of Board succession. Additionally, our Board, its committees and each individual director are regularly assessed regarding their effectiveness and contribution (including self-assessments).





## Corporate information

### 2011 BOARD OF DIRECTORS AND COMMITTEE MEMBERSHIP<sup>1, 3, 4</sup>

Board of Directors <sup>1</sup>	Audit Committee <sup>2, 3</sup>	Corporate Governance, Compensation and Nominating Committee	Environment, Health and Safety Committee	Keephills 3 Project Oversight Committee <sup>5</sup>
Don Lowry (Chair) <sup>4</sup>				
Albrecht Bellstedt		Chair	✓	
William Bennett	Chair		✓	
Brian Bentz			Chair	✓
Hugh Bolton				
Richard Cruickshank		✓		✓
Philip Lachambre	✓		✓	
Brian MacNeill		✓		
Allister McPherson	✓			✓
Robert Phillips		✓		Chair
Janice Rennie	✓	✓		
Brian Vaasjo				

1 All members, except Mr. Cruickshank and Mr. Vaasjo, 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. Mr. Vaasjo is not considered independent as he is the President and CEO of the company.

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 within the 'Audit Committee Report' in the Management Proxy Circular.

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

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

5 Disbanded at the end of 2011 with the commissioning of Keephills 3.

### SENIOR EXECUTIVES

**BRIAN VAASJO** President and Chief Executive Officer

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

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

**BRYAN DENEVE** Senior Vice President, Commercial Services

**STUART LEE** Senior Vice President and Chief Financial Officer

**JAMES OOSTERBAAN** Senior Vice President, Operations and Commodity Portfolio Management

**DARCY TRUFYN** Senior Vice President, Construction and Engineering



In 2012, board members Janice Rennie and Brian MacNeill retired from the Board of Directors. Doyle Beneby and Peggy Mulligan were elected to the Board in 2012. Bios of Board members can be found in our 2012 Management Proxy Circular.

www.



## Report scope

The scope of Capital Power's operations changed significantly in 2011 as a result of a divestiture, acquisitions and developments, including the divestiture of Capital Power Income L.P. (CPILP) and its 18 facilities. When comparing 2011 performance to prior years, readers are cautioned that 2010 and 2009 data in this report may include CPILP facilities.

This report includes energy production and environmental performance data from power plants for which Capital Power Corporation held the operating permit in 2011, 2010 and 2009 respectively. 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 Keephills 3, Joffre and Taylor Coulee facilities is not included because we do not hold the operating permits.

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 emission 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 emission totals or emission 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 report annually on our corporate responsibility.

### 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 and is noted accordingly. Other 2009 data is presented as a 'snapshot in time' as at December 31, 2009.

Data for 2011 is for the 12-month period starting January 1, 2011 and ending December 31, 2011.

### PROCESS FOR DEFINING CONTENT

An extensive process for defining content, including stakeholder consultation, was developed by our predecessor company in 2007 and 2008. In developing our 2011 report, we followed similar guidelines in determining priority topic areas and materiality and incorporated feedback from our 2010 report.

### OTHER REPORTING

Other public disclosures, in particular the 2011 Annual Report, 2011 Annual Information Form, and 2011 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](http://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](http://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 emission performance and other issues related to plant and mine operations. Back issues are available at [www.capitalpower.com](http://www.capitalpower.com).

We also distribute newsletters for residents living near our Kingsbridge 1 Wind Power facility (Ontario), and our other facilities in construction – Quality Wind Project (British Columbia), Halkirk Wind (Alberta), Port Dover & Nanticoke Wind Project (Ontario) and K2 Wind Power Project (Ontario).

### THIRD-PARTY ASSURANCE

Ernst and Young (E&Y) was engaged to review methodologies, data collection and analysis processes used to compile data for this report. E&Y'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 86.





GRI  
INDICATOR  
DESCRIPTION  
AND PAGE

## STRATEGY AND ANALYSIS

- 1.1 Statement from president and CEO 5
- 1.2 Key impacts, risks and opportunities 47

## ORGANIZATIONAL PROFILE

- 2.1 Name of organization IFC
- 2.2 Products IFC
- 2.3 Operational structure IFC, 10
- 2.4 Location of headquarters IFC
- 2.5 Number of countries where organization operates IFC, 11
- 2.6 Nature of ownership IFC
- 2.7 Markets served IFC, 10, 11
- 2.8 Scale of the organization IFC, 10, 11, 43-45, 64
- 2.9 Significant changes 5, 10
- 2.10 Awards 21

## REPORT PARAMETERS

- 3.1 Reporting period 81
- 3.2 Date of previous report 5
- 3.3 Reporting cycle 81
- 3.4 Contact for questions 3, BC
- 3.5 Process for defining content 81
- 3.6 Boundary of report 5, 81
- 3.7 Limitations on scope 81
- 3.8 Basis for reporting on joint ventures, subsidiaries, etc. 81
- 3.9 Data measurement techniques 13, 16, 20, 44, 45, 49, 50, 66
- 3.11 Significant changes from previous reporting periods 5, 81
- 3.12 GRI content index 82-84
- 3.13 Assurance 86

## GOVERNANCE, COMMITMENTS AND ENGAGEMENT

- 4.1 Governance structure 79
- 4.2 Function of the Chair 78
- 4.3 Independent and/or non-executive board members 78
- 4.4 Mechanisms for shareholder and employee input 78, 79
- 4.5 Compensation and performance 79
- 4.6 Conflicts of interest process 78, 79
- 4.7 Process for determining qualifications 78, 79
- 4.8 Mission, values, codes of conduct 78
- 4.9 Procedures for overseeing performance, risks and opportunities 78, 79
- 4.10 Process for evaluating board performance 79
- 4.11 Precautionary principle 22
- 4.12 Externally developed charters (economic, environmental, social) 78
- 4.13 Association memberships 85
- 4.14 Stakeholders engaged 30, 31, 34, 36, 37
- 4.15 Basis of identifying stakeholders 30
- 4.16 Approaches to stakeholder engagement 30
- 4.17 Key topics and concerns 31-37

## ENVIRONMENT

- EN1 Materials used 15
- EU1 Installed capacity, broken down by primary energy source and by regulatory regime 15
- EN2 Percentage of recycled materials 15
- EU2 Net energy output broken down by primary energy source and by regulatory regime 16
- EN3 Direct energy consumption 15
- EN5 Energy saved – conservation 15

- EU5 Allocation of CO<sub>2</sub> emission allowances or equivalent, broken down by carbon trading framework 49, 50-52
- EN8 Total water withdrawal 59
- EN9 Water sources affected 59
- EN10 Water recycled 59
- EN11 Location and size of land 56
- EU11 Average generation efficiency of thermal plants by energy source and by regulatory regime 52
- EN12 Impact on biodiversity 54-58
- EN13 Habitats protected/restored 54-58
- EU13 Biodiversity of offset habitats compared to the biodiversity of the affected areas 54-58
- EN14 Managing impacts on biodiversity 54-58
- EN15 ICUN Red List species 54, 55, 58
- EN16 GHG emissions by weight 49
- EN18 Initiatives to reduce GHGs 48, 53
- EN19 Emissions of ozone-depleting substances by weight 49
- EN20 NO<sub>x</sub>, SO<sub>x</sub>, other emissions by weight 49
- EN21 Total water discharge 59
- EN22 Total weight of waste 60
- EN23 Number/volume of spills 61
- EN24 Weight of hazardous waste 61
- EN25 Water bodies and habitat affected by discharged water 59
- EN26 Initiatives to mitigate impacts of products/services 48, 53-58
- EN28 Monetary value of fines, and other sanctions for non-compliance with environmental laws 61

## HUMAN RIGHTS

- HR1 Investment agreements with human rights clauses 22, 68
- HR2 Suppliers screen for human rights 22



- HR3** Employee training on human rights 22
- HR4** Discrimination incidents 68
- HR5** Protecting freedom of association/collection bargaining 22
- HR6** Child labour issues 22
- HR7** Forced labour issues 22
- HR8** Security personnel trained in human rights policies 22
- HR9** Incidents/violations regarding indigenous peoples 22
- HR10** Number of human rights reviews/impact assessments 22
- HR11** Grievances related to human rights 22

#### **LABOUR PRACTICES/DECENT WORK**

- LA1** Total workforce 64
- LA2** Employee new hires/turnover rate 64, 66
- LA3** Benefits 67, 76
- LA4** Collective bargaining 71
- LA5** Notice periods for operational changes 71
- LA6** Workforce in health and safety committees 21
- LA7** Injuries, diseases, absenteeism 66, 20, 76
- LA8** Education and support for disease prevention 76
- LA9** Health and safety topics in trade union agreements 21
- LA11** Skills management and lifelong learning 73-75
- LA13** Composition of governance bodies and breakdown of employees by category 65, 78
- LA14** Ratio of basic salary of men to women 65
- EU14** Programs and processes to ensure the availability of a skilled workforce 73-75
- EU15** Percentage of employees eligible to retire in the next five and ten years, broken down by job category and by region 64

- EU16** Policies and requirements regarding health and safety of employees and employees of contractors and subcontractors 19, 21
- EU17** Days worked by contractor and subcontractor employees involved in construction, operation and maintenance activities 21
- EU18** Percentage of contractor and subcontractor employees that have undergone relevant health and safety training 21

#### **SOCIETY**

- SO1** Programs to manage impacts on communities 25-29
- EU19** Stakeholder participation in the decision-making process related to energy planning and infrastructure 30-37
- EU20** Approach to managing the impacts of displacement 31
- EU21** Contingency planning measures, disaster/emergency management plan and training programs, and recovery/restoration plans 23
- EU22** Number of people physically or economically displaced, and compensation, broken down by types of project 31
- EU25** Number of injuries and fatalities to the public involving company assets, including legal judgments, settlements and pending legal cases of diseases 22
- SO2** Risks related to corruption 22
- SO3** Employee training for anti-corruption 22
- SO4** Actions taken in response to corruption incidents 22, 68
- SO5** Public policy positions and lobbying 48
- SO6** Financial/in-kind contributions to political parties and politicians 48
- SO7** Legal actions for anti-competitive behaviour 22
- SO8** Fines and sanctions for non-compliance with laws/regulations 22

#### **PRODUCT RESPONSIBILITY**

- PR2** Incidents of non-compliance – health and safety 22
- PR3** Type of product and service information 22
- PR4** Incidents of non-compliance – labelling 22
- PR5** Customer satisfaction 22
- PR6** Marketing communications – laws 22
- PR7** Marketing communications – compliance 22
- PR8** Customer privacy 22
- PR9** Fines for non-compliance 22

#### **ECONOMIC**

- EC1** Economic value generated and distributed, including donations 44-45
- EC2** Financial implications & risks for activities related to climate change 47-48
- EC3** Coverage of defined benefit plan obligations 67
- EC4** Financial assistance received from government 53, 44-45
- EC5** Range of ratios of entry-level wage compared to local minimum wage 67
- EC6** Policy, practices and proportion of spending on locally-based suppliers 44-45
- EC7** Procedures for local hiring and proportion of senior management hired from local communities 22
- EC8** Impact of infrastructure investments and services for public benefit 31-37, 53-57
- EU8** R&D expenditures aimed at providing reliable electricity and promoting sustainable development 53
- EC9** Indirect economic impacts 44-45
- EU30** Average plant availability factor by energy source and by regulatory regime 42



## EXCLUSIONS

### GRI INDICATORS NOT REPORTED



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.

3.10	<b>Effect of any restatements of information in previous report</b> No restatements occurred.	EU12	<b>Transmission and distribution losses</b> Capital Power does not operate transmission and distribution lines.	LA10	<b>Average hours of training per year per employee</b> Capital Power does not currently collect this data. A Learning Management module is planned for implementation in late 2012/early 2013.
EU3	<b>Number of customer accounts</b> Capital Power has no retail power business and, therefore, no retail customer accounts.	EN17	<b>Other greenhouse gas emissions by weight</b> Not material.	LA12	<b>Percentage of employees receiving regular performance and career development reviews</b> 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.
EN4	<b>Indirect energy consumption</b> Capital Power does not track this information, and emissions from indirect energy consumption are not material compared to direct emissions from operations.	EU23	<b>Programs to improve or maintain access to electricity and customer support</b> Capital Power has no retail power business and, therefore, no retail customer accounts.	LA15	<b>Return to work and retention rates after parental leave by gender.</b> Capital Power does not currently collect this data.
EU4	<b>Length of transmission lines</b> Capital Power does not operate transmission and distribution lines.	EU24	<b>Practices to address barriers to accessing and safely using electricity and customer support services</b> Capital Power has no retail business and, therefore, no retail customer accounts.	PR1	<b>Life cycle stages in which health and safety impacts of products and services are assessed for improvement</b> As a power producer, Capital Power does not have products and services.
EU6	<b>Management approach to ensure short- and long-term electricity availability and reliability</b> 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.	EU26, 27	<b>Population unserved in licensed distribution or service areas</b> Not applicable. Capital Power does not provide transmission and distribution services and has no retail business.	SO9	<b>Operations with significant potential or actual negative impacts on local communities</b> Capital Power continually monitors its environmental impact and works closely with the community. No reports to date have attributed negative impacts specific to Capital Power operations.
EU7	<b>Demand side management programs</b> Capital Power has no retail power business and, therefore, no customer-facing demand management programs.	EU27	<b>Number of residential disconnections</b> Not applicable. Capital Power has no retail power business and, therefore, no retail customer accounts.	SO10	<b>Prevention and mitigation measures for negative impacts on local communities</b> Capital Power continually monitors its environmental impact and works closely with the community. No reports to date have attributed negative impacts specific to Capital Power operations.
EN7	<b>Initiatives to reduce indirect energy consumption</b> Capital Power does not currently collect this data.	EU28, 29	<b>Power outage frequency and duration</b> Not applicable. Capital Power does not provide transmission and distribution services.		
EU9	<b>Provisions for decommissioning nuclear power sites</b> Not applicable. Capital Power does not operate or own any nuclear power generation.	EN27	<b>Percentage of products sold and package materials reclaimed</b> Not applicable.		
EU10	<b>Planned capacity against projected electricity demand over long term</b> 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.	EN29	<b>Significant environmental impact of transporting products</b> Capital Power does not currently collect this data.		
		EN30	<b>Total environmental protection expenditures</b> 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.		





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

## AFFILIATIONS

Air and Waste Management Association (USA)	Association of Science and Engineering Technology Professionals of Alberta (ASET)	Certified General Accountants Association of Alberta (CGA)	Edmonton Chamber of Commerce	Institute of Corporate Directors	Northern Alberta Risk and Insurance Management Society
Alberta Chamber of Resources	Calgary Chamber of Commerce	Certified Management Accountants of Alberta (CMA)	Electricity Consumers Resource Council	Financial Executives International	Northwest and Intermountain Power Producers Coalition
Alberta Industrial Fire Protection Association	California Cogeneration Council	Chartered Accountants of Alberta (CA)	Electric Power Research Institute	Institute of Power Engineers	Ontario Energy Association
Alberta Safety Council	Cambridge Chamber of Commerce	Chartered Business Valuators (CBV)	Electric Power Supply Association	International Association of Business Communicators (IABC)	Project Management Institute
American Chamber of Commerce in Canada	Canada Arizona Business Council	Chartered Financial Analyst (CFA)	Energy Policy Institute of Canada	International Emissions Trading Association	Public Affairs Council
Association of Corporate Counsel	Canadian Bar Association	Colorado Independent Energy Association	Globe Foundation of Canada	Interprovincial Offset Group	Public Policy Forum
Arizona Competitive Power Alliance	Canadian Chamber of Commerce	Clean Air Strategic Alliance	Goderich Chamber of Commerce	Industry Provincial Offsets Group	Purchasing Management Association of Canada (PMAC)
Association for Operations Management (APICS)	Canadian Clean Power Coalition	Clean Energy Association of British Columbia	Gulf Coast Power Association	Kapuskasing and District Chamber of Commerce	Strathcona Industrial Association
Association of General Counsel of Alberta	Canadian Electricity Association	Conference Board of Canada	Independent Energy Producers Association (of California)	Law Society of Alberta	United States Combined Heat and Power Association
Association of Power Producers of Ontario	Canadian Information Processing Society (CIPS)	Construction Owners Association of Alberta	Independent Power Producers of Alberta and British Columbia	Leduc and District Chamber of Commerce	West Central Airshed Society
Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA)	Canadian Wind Energy Association	Corporate Executive Board	Independent Power Producers of New York	NAIT Alternative Energy Research Program	Western Electricity Coordinating Council
	Centre for Energy Advancement through Technological Innovation International (CEATI)	Council for Information Technology Executives	Independent Power Producers Society of Alberta	New England-Canada Business Council	Western Power Trading Forum (WPTF)



# Independent Limited Assurance Statement

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

## OUR RESPONSIBILITIES

Our limited assurance engagement has been planned and performed in accordance with the International Standard on Assurance Engagements ISAE 3000 "Assurance Engagements other than Audits or Reviews of Historical Financial Information".

### Subject Matter

We have performed a limited assurance engagement on the following quantitative corporate responsibility performance indicators that are presented on page 82 and 83 of the Capital Power Corporate Responsibility Report ("the Report") for the year ended December 31, 2011:

- Greenhouse gas emissions and intensity [EN16]
- Reportable Environmental Incidents [EN23]
- NO<sub>x</sub>, SO<sub>x</sub> other emissions by weight [EN20]
- Habitats protected/restored [EN13]
- Stakeholder participation in the decision-making process related to energy planning and infrastructure [EU19]
- Employee total recordable injury/illness frequency (TRIF) [LA7]

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

### Criteria

Capital Power has prepared its specified performance information in accordance with the GRI G3 Guidelines or, where relevant, internally developed criteria.

### Capital Power Management Responsibilities

The Report was prepared by the management of Capital Power, who is responsible for the collection and presentation of the performance indicators, statements, claims in the Report and the criteria

used in determining that the information is appropriate for the purpose of disclosure in the Report. In addition, management is responsible for maintaining adequate records and internal controls that are designed to support the reporting process.

### Level of Assurance

Our procedures were designed to obtain a limited level of assurance on which to base our conclusions. The procedures conducted do not provide all the evidence that would be required in a reasonable assurance engagement and accordingly, we do not express a conclusion conveying a reasonable level of assurance. While we obtained an understanding of management's internal processes when determining the nature and extent of our procedures, our limited assurance engagement was not designed to express a conclusion on internal controls.

### Work Performed

In order for us to express a conclusion in relation to the above scope of work, we have sought to answer the following questions for the performance indicators reviewed:

#### Completeness

Has Capital Power fairly presented performance information concerning the selected performance indicators with respect to the boundaries and time period defined in the Report?

Has Capital Power included sustainability performance information from all material entities in its defined boundary for its reporting of the selected performance indicators?

Has Capital Power accurately collated corporate data relating to the selected performance indicators from operations level data?

#### Accuracy

Is the data reported for the selected performance indicators sufficiently accurate and detailed for stakeholders to assess Capital Power's performance?

Our assurance procedures at Capital Power's corporate head office included, but were not limited to:

- Interviewing selected personnel at Corporate and selected sites to understand the key sustainability issues related to the selected performance data and processes for the collection and accurate reporting of performance information
- Where relevant, obtaining an understanding of the design and implementation of systems and processes for data aggregation and reporting
- Checking key assumptions against the evidence to support the assumptions
- Checking the accuracy of calculations performed, on a test basis, primarily through inquiry, variance analysis and re-performance of calculations, and analytical procedures
- Checking that data and statements had been correctly transcribed from corporate systems and/or supporting evidence into the Report

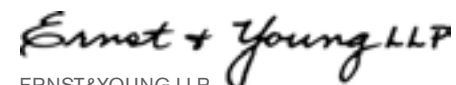
### Limitations of our Work Performed

Our scope of work did not include expressing conclusions in relation to:

- The materiality, completeness or accuracy of data sets or information relating to areas other than the selected performance data, and any site-specific information
- Information reported outside of Capital Power's 2011 Corporate Responsibility Report
- Management's forward-looking statements
- Any comparisons made by Capital Power against historical data
- The appropriateness of definitions for internally developed criteria

### Our Conclusion

Based on our procedures for this limited assurance engagement 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, reported in accordance with the relevant criteria.



ERNST&YOUNG LLP  
Calgary, Canada July 31, 2012



## 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 CO<sub>2</sub>. In the atmosphere, a greenhouse gas that affects the Earth's temperature.

**Carbon dioxide equivalent (also CO<sub>2</sub>E or CO<sub>2</sub> equivalent)** Used to compare emissions from various greenhouse gases based on their global warming potential (GWP). The CO<sub>2</sub> 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.

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

**Gigajoule (GJ)** Equals one billion Joules. A Joule is the work required to produce one watt of power for one second.

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

**Kilogram (kg)** A unit of measurement that equals a thousand grams.

**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.

**Megagram (Mg)** A unit of measurement that equals one thousandth of a gram.

**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 workday, 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. Gross production (MWh) – station services energy use (MWh) = 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.



## 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 700 copies, Capital Power saved the following resources:



56

TREES PRESERVED FOR THE FUTURE



25,765 Gal

WASTE WATER FLOW SAVED



1,564 lbs

SOLID WASTE NOT GENERATED



5,350 lbs

NET GREENHOUSE GASES PREVENTED



18,000,000

BRITISH THERMAL UNITS OF ENERGY NOT CONSUMED

Calculated based on data research provided by Environmental Defense Fund.  
Uses 100% certified renewable electricity.

## FORWARD-LOOKING INFORMATION

Forward-looking information or statements included in this Corporate Responsibility Report are provided to inform Capital Power's stakeholders about management's assessment of the company's future plans and operations. This information may not be appropriate for other purposes. The forward-looking information in this Corporate Responsibility Report is generally identified by words such as will, anticipate, believe, plan, intend, target, and expect, or similar words that suggest future outcomes.

Material forward-looking information in this Corporate Responsibility Report includes information with respect to: (i) addition of capacity, change in wind fuel mix, and timing of commercial operation of wind projects under development; (ii) performance targets for 2012, including safety targets; and (iii) environmental compliance targets.

These statements are based on certain assumptions and analyses made by the company 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 relate to: (i) electricity and other energy prices; (ii) performance; (iii) business prospects and opportunities, including expected growth and capital projects; (iv) status of and impact of policy, legislation and regulations; and (v) effective tax rates.

Whether actual results, performance or achievements will conform to the Company'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 the Company's expectations. Such material risks and uncertainties are: (i) power plant availability and performance including maintenance expenditures; (ii) changes in electricity prices in markets in which the Company operates; (iii) regulatory and political environments including changes to environmental, financial reporting and tax legislation; (iv) acquisitions and developments including timing and costs of regulatory approvals and construction; (v) ability to fund current and future capital and working capital needs; (vi) changes in energy commodity market prices and use of derivatives; (vii) changes in market prices and availability of fuel; and (viii) changes in general economic and competitive conditions. See "Risks and Risk Management" in the company's Management's Discussion and Analysis for the year ended December 31, 2011 which is available on SEDAR for further discussion of these and other risks.

Readers are cautioned not to place undue reliance on any such forward-looking statements, which speak only as of the date made. The company 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 the company's expectations or any change in events, conditions or circumstances on which any such statement is based, except as required by law.





**We are on a journey of  
continuous improvement.**

**smith**  
+ ASSOCIATES



Designed and produced by **smith + associates**  
[www.smithandassoc.com](http://www.smithandassoc.com)  
Please recycle.

**JIMMY SHOOTS**  
PHOTOGRAPHY BY JIMMY JEONG

Printed in Canada.





**CORPORATE HEADQUARTERS  
EXTERNAL AND INVESTOR RELATIONS**

Capital Power Corporation  
12th Floor EPCOR Tower  
1200 – 10423 101 Street NW  
Edmonton, AB T5H 0E9

**capitalpower.com**

