2016
Corporate
Responsibility
Report

WE'RE MOVING FORWARD

Alberta Top 70 Employer

Best 50 Corporate Citizen in Canada

Capital Power

Profile

Capital Power is a growth-oriented North American power producer headquartered in Edmonton, Alberta. The company develops, acquires, operates, and optimizes power generation from a variety of energy sources. As of December 31, 2016, Capital Power owned approximately 3,200 megawatts of power generation capacity at 18 facilities across North America and had more than 700 megawatts of owned generation capacity in advanced development in Alberta and Kansas.

FUELS

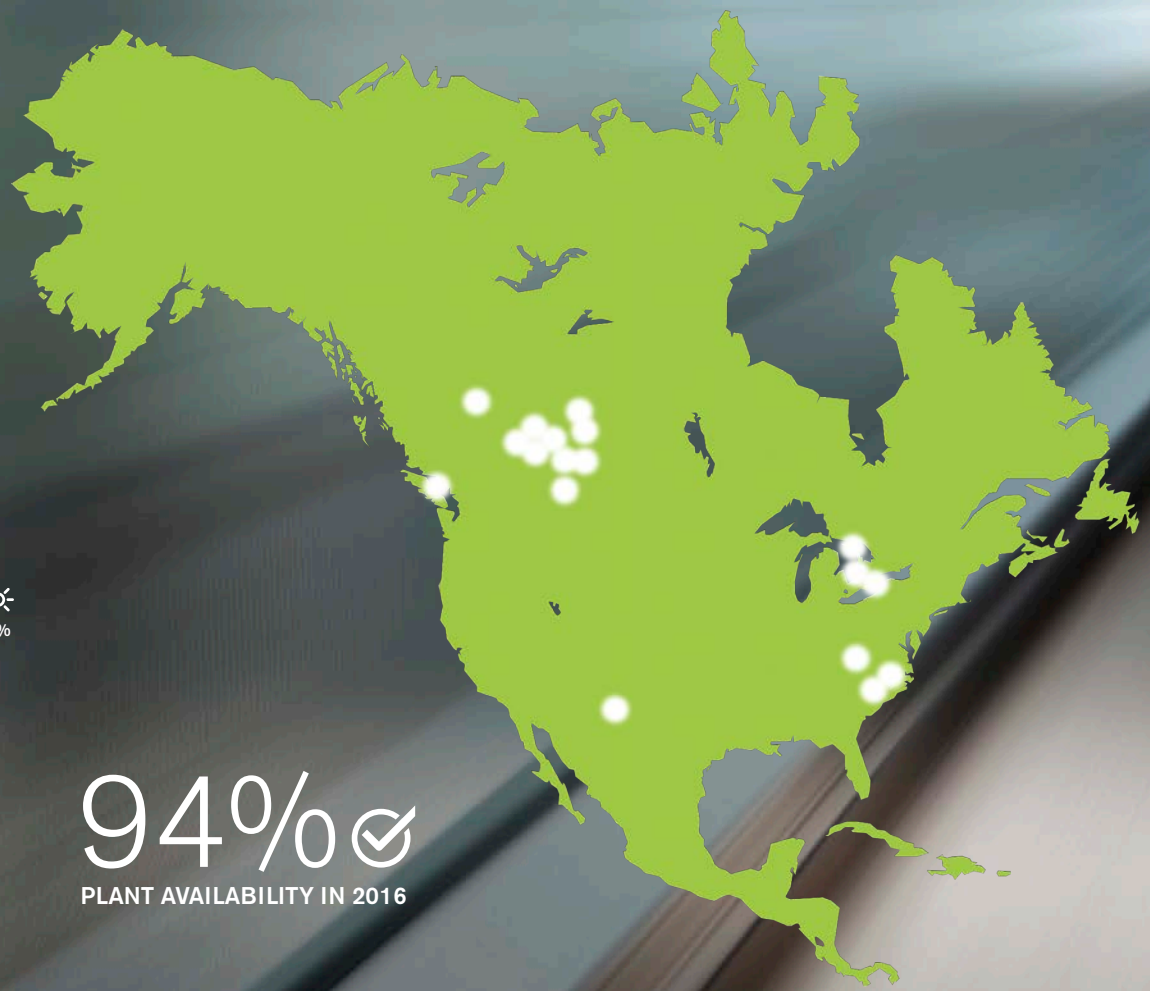
- Biomass/ Solid fuels
- Coal
- Natural gas
- Solar
- Wind

EMPLOYEES

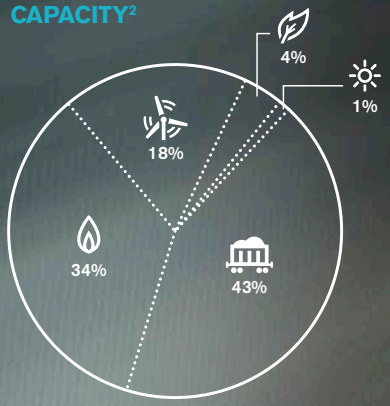
668[1]

FACILITIES

18



OUR GENERATION CAPACITY[2]



94%

PLANT AVAILABILITY IN 2016

We hold a vision where our electricity supply is transformed, while remaining reliable, competitively priced, and market driven. A vision where government, the private sector, Indigenous peoples, civil society, and citizens work together in a spirit of partnership and mutual respect.

1 Consists of full- and part-time employees, as of December 31, 2016.

2 Capacity percentages are for Capital Power's owned generation capacity, which differs from the scope used for emissions and energy production (based on the facilities we operate) in this report.

Message from the President and CEO, Brian Vaasjo

The power generation industry is experiencing a period of transformation. Capital Power is focused on navigating the transition to a lower-carbon energy future by tackling environmental challenges, participating in developing regulatory changes, and contributing to delivering sustainable solutions.

Achieving success while facing this period of uncertainty and change requires resilience, innovation, and foresight, which are all aspects of our corporate strategy. You can read more about how Capital Power's commitment to corporate responsibility is helping guide our path through this energy transition, and helping deliver a stable dividend and disciplined growth for our shareholders.

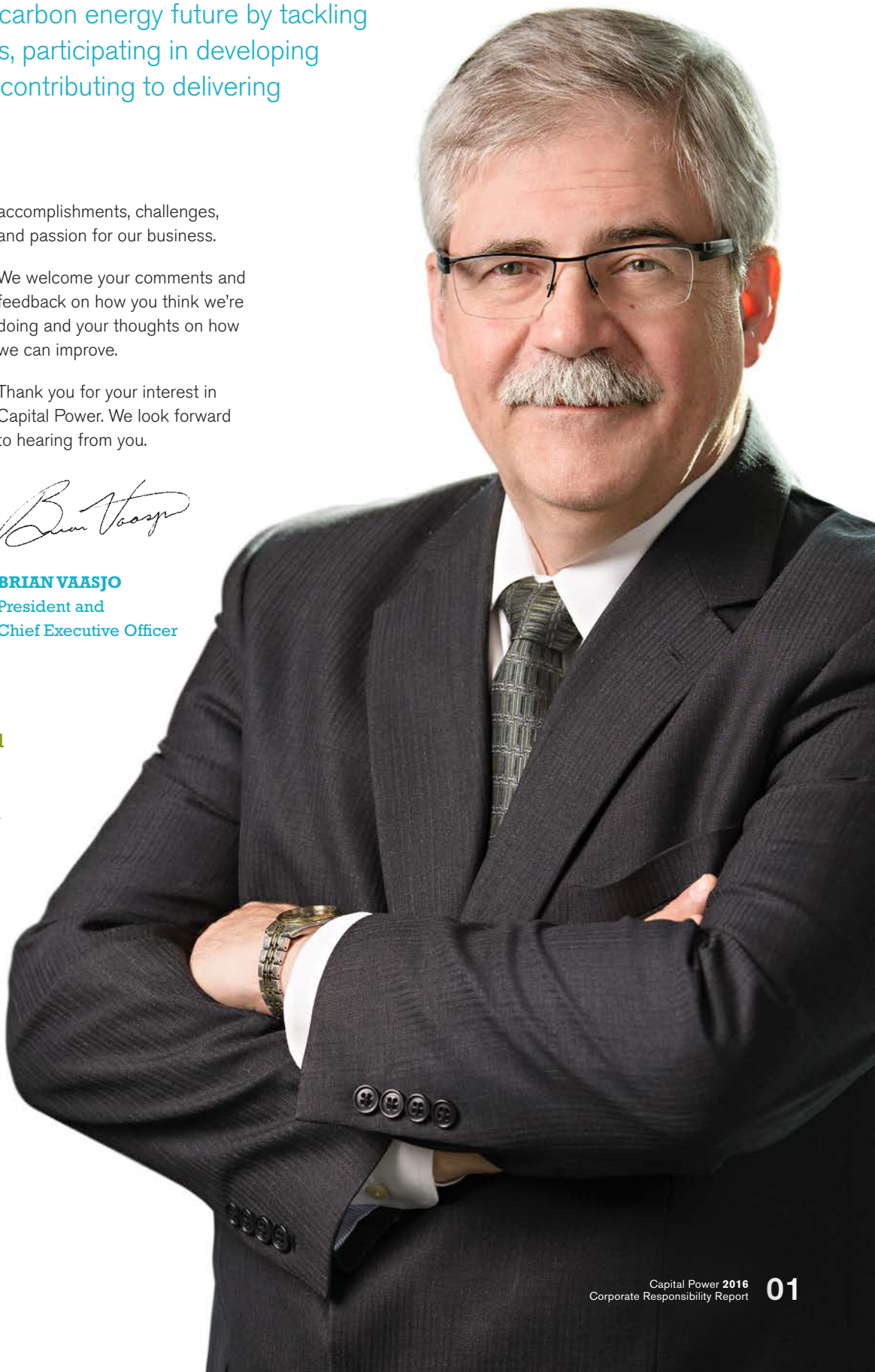
On behalf of all of us at Capital Power, we are proud to share our 2016 Corporate Responsibility Report, *We're Moving Forward.* This report reflects our performance, accomplishments, challenges, and passion for our business.

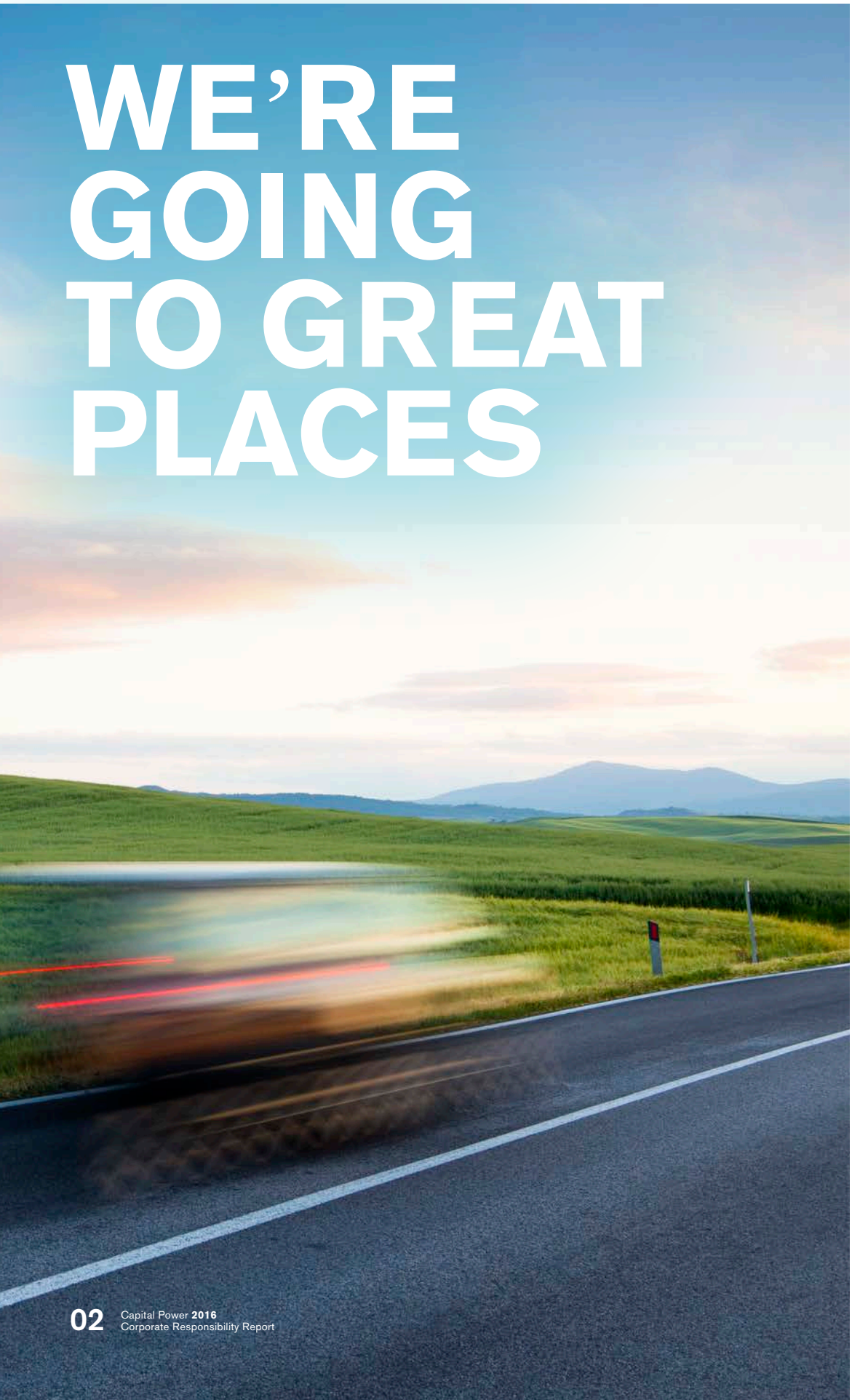
We welcome your comments and feedback on how you think we're doing and your thoughts on how we can improve.

Thank you for your interest in Capital Power. We look forward to hearing from you.

BRIAN VAASJO
President and
Chief Executive Officer

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





Executive team

Brian Vaasjo
President and CEO

Bryan DeNeve
Senior Vice President,
Finance and CFO

Kate Chisholm
Senior Vice President,
Legal and External Affairs

Darcy Trufyn
Senior Vice President,
Operations, Engineering,
and Construction

Mark Zimmerman
Senior Vice President,
Corporate Development
and Commercial Services

Jacquie Pylypiuk
Vice President,
Human Resources

Board of directors*

Donald Lowry
Board Chair

Albrecht Bellstedt
Doyle Beneby
Patrick Daniel
Jill Gardiner
Kelly Huntington
Philip Lachambre
Katharine Stevenson
Keith Trent
Brian Vaasjo

* At the date of publication, Capital Power's Board consisted of 10 directors led by a non-executive chair and comprised seven men and three women.

Contact us

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FORWARD-LOOKING INFORMATION

Forward-looking information or statements included in this Corporate Responsibility Report are provided to inform readers about management's assessment of Capital Power'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. By their nature, such statements are subject to significant risks, assumptions, and uncertainties, which could cause Capital Power's actual results and experience to be materially different than the anticipated results. Readers are cautioned not to place undue reliance on any such forward-looking statements. 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.

Sections

Features

Stories

CRAFTING A RESILIENT STRATEGY: NAVIGATING THE TRANSITION TO A LOWER-CARBON ENERGY FUTURE

We expect decarbonization and environmental policy to remain at the forefront for the electricity industry, governments, and our company. But they are not our only focus. As this report outlines, our performance targets and our business strategies reflect a holistic view of what's necessary to achieve our vision of being one of North America's most respected, reliable, and competitive power generators.

Electricity: The move to decarbonization

Over the past decade, the power industry has focused significantly on decarbonizing power generation.

Achieving the commitment made in the *Paris Climate Agreement* to limit global warming to a two-degree-Celsius increase will require changes in the way power is generated, buildings are heated and cooled, vehicles are fueled, and industrial processes are energized.

In response, companies and governments have already begun designing and implementing solutions to achieve near-zero and, ultimately, net-zero emissions.

Past efforts to reduce emissions focused on building renewables, increasing energy efficiency, and listening to market signals—all of which are still significant in current and future efforts.

Today, efforts on decarbonization are focused on reducing the electricity sector's carbon footprint, and then using electricity to transform other industries. As a result, electricity use is expected to increase from 20% of current end-energy used to 50% in the future.

Far from shrinking demand, decarbonization ambitions will require a 200% to 300% increase in electricity consumed in North America. The need for clean generation sources that can adjust their power output to maintain system reliability will be high, yet the pace and path of decarbonization is uncertain and holds risk.

Electricity use is expected to increase from being 20% of current energy used to 50% as emission-intense hydrocarbon energy sources are replaced with low-emission electricity. Overall, decarbonization ambitions will require a 200% to 300% increase in North American electricity consumption.

Capital Power's strategy: Resiliency in a time of change

Amid this uncertain and changing global energy landscape, we have a strategy designed to be resilient in a wide variety of scenarios.

One of the foundations for our scenario planning is *Canada's Mid-Century Long-Term Low-Greenhouse Gas Development Strategy*, which outlines several possible implementation pathways for the *Pan-Canadian Framework on Clean Growth and Climate Change.*

In any scenario we encounter, we will seek to deliver for our shareholders a stable dividend and sustained growth supported by growing contracted cash flows. To achieve this, we're pursuing a four-pronged strategy:

- Protect and optimize our assets, in part by reducing our carbon emissions.
- Grow our generation fleet through disciplined acquisitions and development.
- Evolve with the changing power and carbon markets.
- Attract, retain, and develop our talented workforce.

Reducing carbon emissions from existing operations, contributing to policy development, and evolving with the changing power market are key to Capital Power creating value for our shareholders.

Executing on strategy

We made substantial progress implementing our carbon reduction strategies in 2016:

- We entered into an agreement with the Province of Alberta to eliminate all emissions from coal at our Alberta generation facilities by the end of 2030.
- We launched the Genesee Performance Strategy, committing up to $40 million in capital investment to the initiative to reduce carbon emissions at the Genesee Generating Station (Genesee) by 10% or more by 2021.
- We completed a successful biomass co-firing test at Genesee as part of our pursuit of emission reductions pre-2030.
- We pioneered an innovative financial solution for securing long-term predictable revenues from renewables projects, receiving recognition for the North American Wind Deal of the Year.
- We contributed to the development of rule-making that is expected to facilitate the conversion of some coal facilities to natural gas in Alberta.
- We continued to advance development of our Alberta and United States renewables projects and new high-efficiency natural gas generation for Alberta.

Capital Power launched new initiatives in 2016 to reduce near-term and pre-2030 carbon emissions at existing facilities, eliminate all emissions from coal at the company's Alberta operations by the end of 2030, and deploy financial innovation to advance renewables development.

Eliminating emissions from coal by end of 2030

In 2016, we entered into an Off-Coal Agreement with the Province of Alberta. As part of implementing the *Alberta Climate Leadership Plan,* we agreed to eliminate our emissions from coal in Alberta by the end of 2030.

The Climate Leadership Plan will dramatically change Alberta's generation mix and alter the future of our young coal fleet at Genesee. Genesee's three coal-fired units are well-maintained and valuable assets that have considerable life beyond the 2030 limit.

In recognition of the capital that will be stranded by the transition, we will receive compensation based on net book value of the assets, paid over 14 years and adjusted for consideration of the potential for non-stranded assets. This approach delivers a step-change emissions reduction for Alberta at a low cost per tonne of avoided emissions, treats capital investors fairly, and avoids burdening ratepayers or taxpayers with unreasonable expenses.

Immediate action at Genesee to reduce emissions

In addition to planning for the 2030 transition, we established a Genesee optimization team to focus on understanding the technical options for Genesee while considering economics, regulatory policies, and potential future developments at the 28,800-acre site.

Our vision is for Genesee to continue to play a vital role in supplying Alberta's electricity needs and for it to remain an important source of employment and community support to the region, as it has for nearly three decades.

In the near-term, we are focused on optimizing Genesee, which emitted about 9.6 million tonnes of carbon dioxide equivalent in 2016. Our project team is aiming to improve its efficiency through a series of targeted investments and operational improvements that are designed to cut emissions at Genesee by more than 850,000 tonnes per year by 2021.

New investments at Genesee are intended to cut greenhouse gas emissions by more than 850,000 tonnes a year by 2021.

Transforming wood waste into clean energy

The integration of biomass into the fuel mix at our existing coal operations offers the opportunity for even greater emission reductions pre-2030.

Last year at Genesee, we completed a $1.5 million co-firing research test blending wood waste from Alberta forestry operations with coal. The tests proved the engineering and technical feasibility of co-firing biomass with coal; at peak performance during the test, 10% of the energy output from the Genesee 1 unit came from biomass, with a matching reduction in coal consumption. Based on our work to-date, we believe biomass can replace as much as 20% to 30% of the coal used by one of our Genesee units.

Alberta mills produce enough surplus wood residuals to replace hundreds of thousands of tonnes of Alberta coal each year. Co-firing with biomass at Genesee will convert mill waste into value-added energy production, create new jobs in rural communities, reduce air emissions, and contribute to the sustainability of Alberta's forestry sector.

Wood waste from Alberta forestry mills can replace up to 30% of the coal used by one of our Genesee units.

Advancing renewables through financial innovation

In addition to government policy, corporate leadership and financial innovation are driving the energy transition. Both are on display in Kansas at our Bloom Wind project.

Bloom was developed using an innovative 10-year Proxy Revenue Swap agreement. The swap secured long-term predictable revenues, which created the opportunity to secure a tax-equity investment. The first buyer to participate in this structure acquired the environmental attributes connected to Bloom Wind, which helped them meet their commitment to cover 100% of their annual energy use from renewable sources.

Bloom's success demonstrates that the continued advancement of renewables will not rely solely on traditional utility procurement driven by renewable portfolio standard (RPS) mandates.

Financial innovation is bringing together corporate leaders who are committed to renewable energy procurement with project developers and investors, and facilitating the efficient allocation of capital, cash flows, risks, and returns.

Capital Power's Bloom Wind project in Kansas was recognized as North American Wind Deal of the Year.

Converting coal units to natural gas: A faster transition to a low-carbon future

Canada is on a path to a low-carbon future. To assist in the transition, we are actively engaging with policy makers.

One focus area is the development of federal regulations that will allow the conversion of coal units to natural gas and will permit them to operate for a limited time. If the regulations are approved, we will have the opportunity to extend our coal-fired units' economic life by converting them to gas and having them operate past 2030.

Converting coal to gas will facilitate a faster, lower-cost transition to cleaner energy sources and reduce the need to build new, long-lived natural gas facilities that could later conflict with Canada's mid-century greenhouse gas goals. For Alberta electricity consumers, conversion is also a practical way to reduce transition costs by leveraging the significant investments already made in existing facilities and transmission infrastructure.

The timing of gas conversions depends on multiple market factors, including future natural gas and carbon prices, and the transition from an energy-only electricity market to a capacity market in Alberta. Our coal fleet is relatively young and well maintained, with superior efficiency, availability, and heat rate to its peers. These positive attributes will remain after the conversion to gas and make the units more competitive in the planned capacity market.

Converting coal units to natural gas will reduce emissions, lower transition costs, and make efficient use of existing infrastructure.

Disciplined growth

As demand grows and generation units retire, new sources of energy will be required. We are at the forefront in Alberta and across North America in the development of high-efficiency natural gas generation and renewables.

In Alberta, our Genesee 4 and 5 project remains best positioned to supply future baseload demand once new facilities are needed. All major regulatory approvals are in place to proceed with construction of the proposed 1,060-MW combined cycle natural gas facility.

We are also actively developing a pipeline of projects to bid in to Alberta's new Renewable Electricity Program, which will procure 5,000 MW of new renewables between now and 2030. Our Whitla Wind project in southern Alberta and the proposed Halkirk 2 Wind facility in east-central Alberta are both candidates for competitive provincial procurement processes, which begin in 2017.

As the leading developer of new power generation in Alberta over the past decade, we have the sites, development and construction expertise, and track record needed to build Alberta's next generation of generation facilities.

Capital Power is well positioned to develop the next generation of renewable and baseload power in Alberta and across North America.

Outside of Alberta, Capital Power's growth strategy is focused on investing in contracted generation. Our renewable energy portfolio has been steadily increasing since 2011. In 2016, 23% of our generation capacity was from renewables, compared to 7% in 2011.

In the first four months of 2017, we acquired 1,267 MW of contracted generation capacity in Ontario, Alabama, and British Columbia. These acquisitions nearly double our owned natural gas generation capacity and will reduce the carbon intensity of our generation fleet and energy production. The addition of these modern, high-quality facilities will enhance our contracted cash flow profile and further diversify our portfolio.

Looking ahead: Disciplined execution of a resilient strategy

In an uncertain and changing world, our strategy is designed to be resilient and deliver value for our shareholders under a wide range of scenarios while meeting society's ambitions for environmental, social, and economic performance.

Company-wide targets for operational excellence, safety, and financial stability are complemented by business plans and performance goals that integrate social and environmental objectives.

We achieve our goals through four core strategies, which are designed to:

- protect and optimize our assets, in part by reducing our carbon emissions from our existing facilities;
- grow our generation fleet through disciplined acquisitions and development;
- evolve with the changing power and carbon markets; and
- attract, retain, and develop our talented workforce.

Working together, our people have the expertise, experience, and resources to optimize our current operations and capitalize on future opportunities. The disciplined execution of our strategies by a talented team across our North American footprint is what will secure our success over the coming decades.

Our commitment to corporate responsibility is foundational to delivering to our shareholders a stable dividend and sustained growth supported by growing contracted cash flows.

Now is the time to look to the future.

HOW WE DID AND WHERE WE'RE GOING

Our investments in sustaining capital and our commitment to high levels of plant reliability are part of delivering reliable electricity supply for consumers and efficient, lower-emission operations at our well-run facilities.

We delivered on our strategy in 2016. We received fair compensation for our coal assets in Alberta, we began construction on Bloom Wind in Kansas, we optimized our existing operations, and we continued to actively pursue new investment opportunities.

Company-wide performance targets and results

Our future is focused on the optimization of our existing facilities, the development of natural gas and wind, and the expansion of our fleet of contracted generation.

Each year, we set company-wide performance targets to define our success and move us toward our vision of being one of North America's most respected, reliable, and competitive power generators. Annual performance pay for the executive and participating employees is linked to a blended measure that includes funds from operations, individual business targets, and company health, safety, and environmental (HSE) performance.

Operational excellence	**Targets**	**Results** (year ended December 31, 2016)
Plant availability average	94%	94%
Sustaining capital expenditures	$65 million	$55 million*
Plant operating and maintenance expenses	$200 to $220 million	$205 million
FINANCIAL STABILITY AND STRENGTH		
Funds from operations	$380 to $430 million	$384 million
***Alberta Climate Leadership Plan* – compensation**	Ensure fair compensation will be received for the proposed accelerated closure of our coal facilities.	During the fourth quarter of 2016, the Company reached an agreement with the Government of Alberta related to compensation for the phase-out of emissions from coal-fired generation by the end of 2030.
DISCIPLINED GROWTH		
Genesee 4 and 5	Proceed with construction based on clarification regarding the *Alberta Climate Leadership Plan* and price signals from the energy only market.	In 2016, limited construction activities took place and full notice to proceed was deferred. Construction and timing of the Genesee 4 project will be considered once greater Alberta market structure certainty exists and new generation is required in Alberta to balance supply and demand.
Advance new development	Execute a contract for output of a new development.	Construction of Bloom Wind commenced in the third quarter of 2016. Capital Power will operate the facility under a 10-year fixed price contract which was executed on April 21, 2016.

* Sustaining capital expenditures were less than target primarily due to lower expenditures for the Company's planned outages and the deferral of various projects into future projects.

Social and environmental goals and results

Aligning performance with economic, social, and environmental goals

Across the company, employees and teams develop business plans and performance targets that integrate a wide range of social and environmental goals and performance measures. Achievement of these goals is recognized through an annual short-term incentive payment, which provides compensation based on achieving annual individual performance measures and company-wide targets for financial performance (as measured by funds from operations) and health, safety, and environment performance (as measured by our HSE index).

The following table provides representative examples of social and environmental targets that appeared in business plans and individual performance plans for 2016 and the actual results achieved. More detailed information on Capital Power's performance in each of these areas can be found later in this report.

Overall goal	2016 performance measure	Annual performance status/result	Learn more
SOCIAL RESPONSIBILITY			
Create a zero-injury culture.	Achieve HSE Performance Index of 1.00. The HSE index measures safe, healthy, and environmentally-accountable work performance through a weighted combination of six leading and two lagging indicators.	Performed better than target, at 1.04.	Safe today, safe tomorrow (pg. 24)
Build a team of engaged employees.	Achieve an engagement survey score in the top quartile.	Achieved an overall engagement score of 71%, higher than 2014 performance and slightly below the top quartile of 75%.	Asking our employees how we can improve (pg. 14)
Retain a strong workforce.	96% or more employees choose to remain with Capital Power.	3.1% of employees resigned in 2016, resulting in a 96.9% retention rate.	Turnover rate (GRI:LA2) (pg. 61)
Focus on and support employee learning and development.	Continue career development plans for the top three levels of the organization and offer iLead learning opportunities to all levels.	Consistent with 2016 target; continued career development throughout the year.	Learning and development (pg. 17)
Invest in citizen-led projects to preserve and strengthen community character, ecology, and heritage.	Work with communities to support initiatives that meet their needs and priorities.	Contributed $1 million through our community investment program.	Community support Thriving with our communities (pg. 20)
ENVIRONMENTAL RESPONSIBILITY			
Create a culture of zero environmental incidents. Recordable environmental incidents include regulatory infractions, spills to land or water, or public complaints.	Eight or fewer environmental incidents.	Five environmental incidents, which were considered minor in nature, were closed with no further action required from the regulators.	Monetary value of fines and other sanctions for non-compliance with environmental laws (GRI:EN28) (pg. 58)
Reach our legislated Alberta Medium-term Greenhouse Gas (GHG) Reduction Targets: 2018 – 2030.	Focus on ways to improve efficiency, reduce carbon compliance costs, and extend the life of our operations.	Continued working toward lowering compliance costs by offsetting development and procurement strategies and lowering GHG intensities.	Creating a resilient strategy: Navigating the transition to a lower-carbon energy future (pg. 4)
Minimize amount of coal by-product going to landfill by reusing fly ash.	Recycle close to 50% of fly ash (coal by-product from G1 and G2) by selling it for use in cement production.	Sold 44% of the fly ash produced from G1 and G2.	Reducing landfill by recycling fly ash (pg. 44)
Enable Alberta's electricity supply's transition from coal-fired to natural gas and renewable energy.	Continue to work with the Alberta government to have no emissions from coal-fired generation by the end of 2030 and to participate in the development of 5,000 MW of new renewable power.	Reached an agreement with the Province of Alberta for the phase-out of coal emissions at Capital Power's operations and advanced two wind projects in Alberta to be ready for the first competitive procurement process in 2017.	Creating a resilient strategy: Navigating the transition to a lower-carbon energy future (pg. 4) How we engage (pg. 27)

For our people:

WORKPLACE CULTURE

We are working hard to build a culture of personal and professional well-being and excellence through our compensation and benefits, learning and development opportunities, community investment and engagement, and ethics and safety programs.

Features

WITH OUR PEOPLE, WE SUCCEED

It takes a strong team of passionate, committed, well-equipped people to run a successful company, and it takes communication, respect, and a shared vision to create a culture in which every employee thrives and drives toward the same goal.

Together, we move from vision to action.

We are working to foster that kind of environment—through development opportunities, wellness programs, safety programs, and contributions to the communities and initiatives our employees care about.

It's about more than just the outcome, it's about the team and community that help get us there.

HIGHLIGHTS

Best 50
Named Corporate Knights Best 50 Corporate Citizen for the seventh year

Top 70
Named one of Alberta's Top 70 Employers

$1M
Contributed $1M through our community investment program

54 employees
Reimbursed 54 employees $90,000 for personal development

For full GRI reporting data, view the supplemental information found in the Global Reporting Initiative Index starting on page 45.

Asking our employees how we can improve

610 employees provided their feedback through our second employee engagement survey and provided input on how we can continue to create the best-possible place to work.

- 90% participation rate
- 3-point improvement in employee engagement, from 68% in 2014 to 71% in 2016
- Top engagement driver: professional growth

Professional development

Capital Power drives a culture of learning and development. In-house courses, funding for development, online sessions, and a talent development program build internal skills and strengthen our team.

- More than 96 employees participated in internal School of Business courses.
- 30 employees gained leadership skills through iLead, our leadership development program.

Wellness

We believe well-being includes mental, physical, financial, and social health, and have a wellness program that focuses on each.

We launched Sprout, an online interactive health and wellness social network, to support our employees' personal wellness goals and add a side of fun.

Six years of support, six years of incredible community

For the sixth year in a row, Capital Power and Edmonton Eskimos' fans came through for military families. Nearly 60 employee volunteers sold out of limited-edition "Support our Troops" T-shirts in record time, raising $40,000, which was matched by Capital Power for a total $80,000 donation to the Edmonton Garrison Military Family Resource Centre.

Safety

We are committed to creating a healthy, safe, environmentally-responsible workplace. Our Zero Means Everything program focuses on both workplace and lifestyle safety and teaches that zero ultimately means getting everyone home from work, safe and healthy, every day.

- Did better than our target and achieved a result of 1.04 on our Health, Safety, and Environment Index
- Had zero lost-time incidents for over two years
- Received two Canadian Electricity Association Awards for safety

Community support

We support our employees and the communities in which they live and work.

- 130 employees and their families volunteered 13,000 hours as part of our EmPowering Communities program, which recognizes employee volunteer time by directing money to non-profit or charitable community service organizations (see page 21).
- Matched $176,320 in employee donations to 134 charities through GENerosity, our matched-giving program. (see page 21).

668*

Total number of employees company-wide

NUMBER OF EMPLOYEES

UNDER 35	35-49	50+
182	295	191

568

Total number of employees in Canada

100

Total number of employees in the United States

900,000

CONTRACTOR HOURS AT OUR FACILITIES AND PROJECTS

GENDER DIVERSITY

Number of employees by gender

MEN (75%)	WOMEN (25%)
500	168

Men in management positions in Canada	Women in management positions in Canada
97	31

Men in management positions in the United States	Women in management positions in the United States
12	0

* Consists of full- and part-time employees, as of December 31, 2016.

COMPENSATION AND BENEFITS

We compare our benefits against our peers in the power generation industry to ensure that what we offer is attractive to potential employees, rewards the performance of our current employees, and supports overall personal and professional development and well-being.

Employee and family assistance

- We make available support through supervisors and Human Resources.
- Employees and their families can also access a confidential, third-party support service and receive short-term counseling for personal, professional, physical, or mental concerns.

Health and wellness features

- We review our Health and Wellness program regularly and design it by region.
- Benefits include:
  - > medical, dental, and vision care
  - > a variety of health spending accounts
  - > income protection in the form of short- and long-term disability
  - > basic and optional levels of life insurance
- We offer a corporate wellness and well-being program.

Retirement and savings plans

- Employees can participate in retirement and savings plans such as pension, 401(k), and voluntary company savings plans, depending on location and eligibility (i.e. permanent versus temporary or union versus non-union employees).
- We also make available financial educational resources to plan participants.

Incentive pay

- We paid $97 million (CAD) in compensation and benefits in 2016 to Canadian employees and $11 million (USD) to United States employees.
- Various employees are eligible for our annual incentive award program. Based on their annual business and people objectives, participating employees are eligible for an award of 7% to 25% or more of base salary, depending on the employee's position.

Rewards and recognition

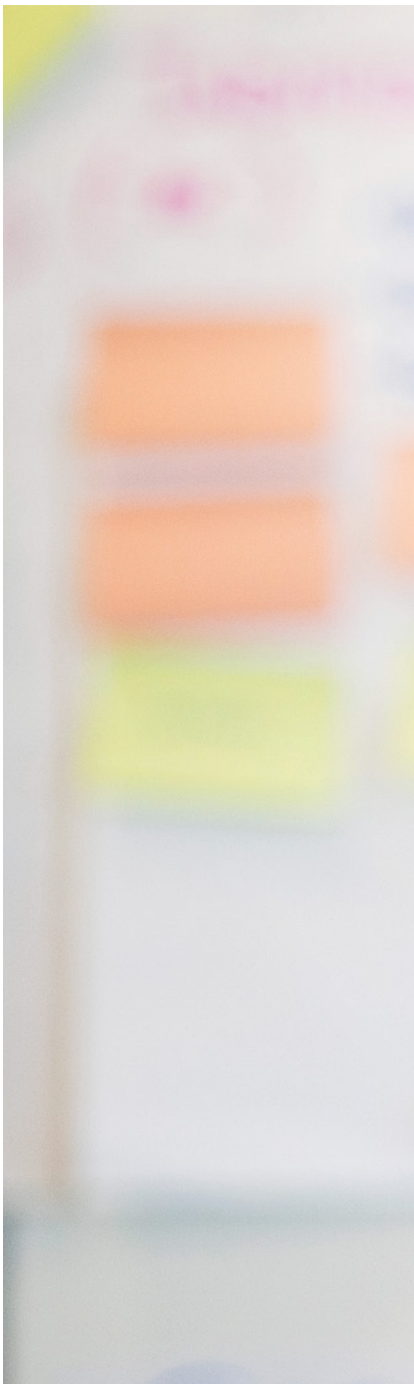
- We recognize employees for service ranging from five to more than 40 years through our Milestone Achievement Program.
- We recognized 138 employees in 2016 with pre-paid credit cards ranging in value from $300 to $3,000. Milestone celebration events were held at three locations in honour of these employees.

Part-time policy

- To assist employees with work-life balance, we make available long-term temporary part-time (i.e. a year or more) or permanent part-time arrangements. Employees can choose to remain part-time or return to full-time in the future.

Educational support

- Permanent employees can access educational support to fund a wide variety of learning and development opportunities in their personal time. Full-time employees can access up to $3,000 and part-time up to $1,500 in a calendar year.
- Certificates, diplomas, degrees, or individual courses at an accredited post-secondary institution are all eligible.
- In 2016, 54 employees benefited from this program, with Capital Power reimbursing approximately $90,000.



LEARNING AND DEVELOPMENT

We support our employees' success by putting programs, support, encouragement, and opportunities in place and by giving our employees the tools by which to learn, grow, be challenged, and be engaged.

We want to inspire, cultivate, and create a culture of learning for each employee to help them reach their full potential. In-house courses, funding for development, online sessions, and a talent development program build internal skills and strengthen our team, which in turn builds and strengthens our business.

- To enhance employees' leadership skills, we offer a program of both mandatory and optional training.
- All employees complete on-boarding, security, ethics, and health and safety training programs.
- To support the development of employees' business skills, we offer in-house courses, including public speaking, business writing, goal setting, and change management.

Supporting continuous learning is important to us. In 2016, we made further enhancements to Blueprint, our learning management system implemented in 2015.

Through Blueprint, employees manage their own learning and have 24/7 access to more than 300 online courses. In 2016, 3,885 courses (1,937 online courses and 1,948 classroom sessions) were recorded in Blueprint.

To help give careers a strong start and introduce future talent to our company, we hosted 21 post-secondary students in various areas of our company as part of our four-month Summer Work Experience Program.

For our communities:

COMMUNITY SUPPORT

Our employees generously donate their time, skills, and talents to causes and initiatives that matter to them.

Features

THRIVING WITH OUR COMMUNITIES

Through our community investment program, we contribute to vibrant, sustainable communities by supporting initiatives that preserve and strengthen community character, ecology, and heritage.

We are committed to being an engaged, involved, and supportive neighbour and to contributing to the communities, associations, and organizations important to our employees. A more involved and engaged community equals a stronger, more connected place for our employees and their families to call home.

Community investment and relationships

We give to local communities through corporate investment programs and the efforts of our exceptional people. We've built giving into the core of our business.

Local communities program

We focus on building relationships with facility neighbours and stakeholders.

EmPowering Communities program

Our EmPowering Communities program directs funds to non-profit or charitable community service organizations in recognition of employee and family volunteer time. Employees who volunteer a minimum of 35 hours of their own time, or combine their time with family members', 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.

GENerosity program

Our GENerosity program aligns the company's charitable activities with the interests of employees through matched giving. Each year, we match up to $500 of each employee's donations made to any registered charity in North America through their GENerosity account.

In addition to the year-round matching, every fall we match, with no individual limit, employee donations to the United Way through the GENerosity program.

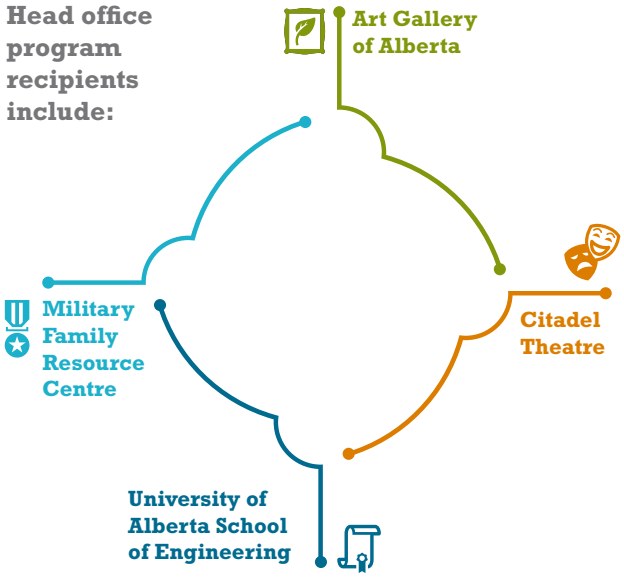
Head office program

Our head office program focuses on providing support to organizations that contribute to the vibrancy and quality of life in Edmonton.

We select these organizations for the value they bring to the broader community and the opportunity they bring for employee volunteer opportunities, engagement, or visibility for our executive or company.

Many of our partnerships are multi-year agreements or are one-year agreements that renew annually.

Head office program recipients include:



HIGHLIGHTS

$1M
contributed to communities

16 organizations
received $556,000 through our head office program

74 organizations
received $148,400 through our local communities program

114 organizations
received $68,500 through EmPowering Communities

130 employees
participated in the EmPowering Communities program

13,000 hrs
of volunteer time reported by employees and their families

$352,640
in total donations after matching $176,320 of employee charitable contributions through the GENerosity program

Edmonton Food Bank support

2016 marked our fourth year as Season Sponsor for the Citadel Theatre, which collected donations for the Edmonton Food Bank from guests at performances of "A Christmas Carol." This year, we further encouraged donations from theatre goers by matching donations up to $20,000. Between our matched giving and Citadel patron donations, over $100,000 was contributed to the Food Bank.

In 2016, we also were Presenting Sponsor of the Edmonton Food Bank's "Huron Carole" fundraising event, at which an additional $80,000 was raised for Edmonton's Food Bank.

Giving generously to provide Alberta wildfire support

In May 2016, Fort McMurray, Alberta was devastated by wildfires. In just three weeks, 118 employees used their GENerosity accounts to contribute $33,270 to Fort McMurray fire relief, which we matched to donate over $66,000 to support those affected by the wildfires.

For the love of art

We have been working with the Art Gallery of Alberta (AGA) since 2009 to bring important works from around the world to Alberta. By the end of 2016, the Capital Powered Art Program helped bring 23 exhibits to the AGA for visitors' enjoyment and to raise Edmonton's national and international profile as a vibrant cultural centre.

More than 150,000 times in 2016, people attended a performance or visited an exhibition at one of the Edmonton arts and culture organizations supported by Capital Power's head office program.

EXPECTING THE MOST OF OURSELVES

We are committed to upholding the highest ethical standards. We stand behind our word, report openly on our performance, and treat our employees, neighbours, and stakeholders with respect.

Ethics training

We place great importance on ethics training. Every two years we reinforce the importance of our *Ethics Policy* and require all employees to certify they have received, read, and understood and will comply with our *Ethics Policy.*

In 2017, our Chief Compliance Officer will be conducting ethics training in person for all major business units.

We encourage our employees to raise potential violations of our *Ethics Policy,* laws, or regulations. To report a concern, employees can:

- speak with their manager or any member of senior management; or
- anonymously report a concern by contacting our 24 hours-a-day, seven-days-a-week Integrity Hotline, which is staffed by an independent third-party under strict confidentiality obligations.

In 2016, we reviewed:

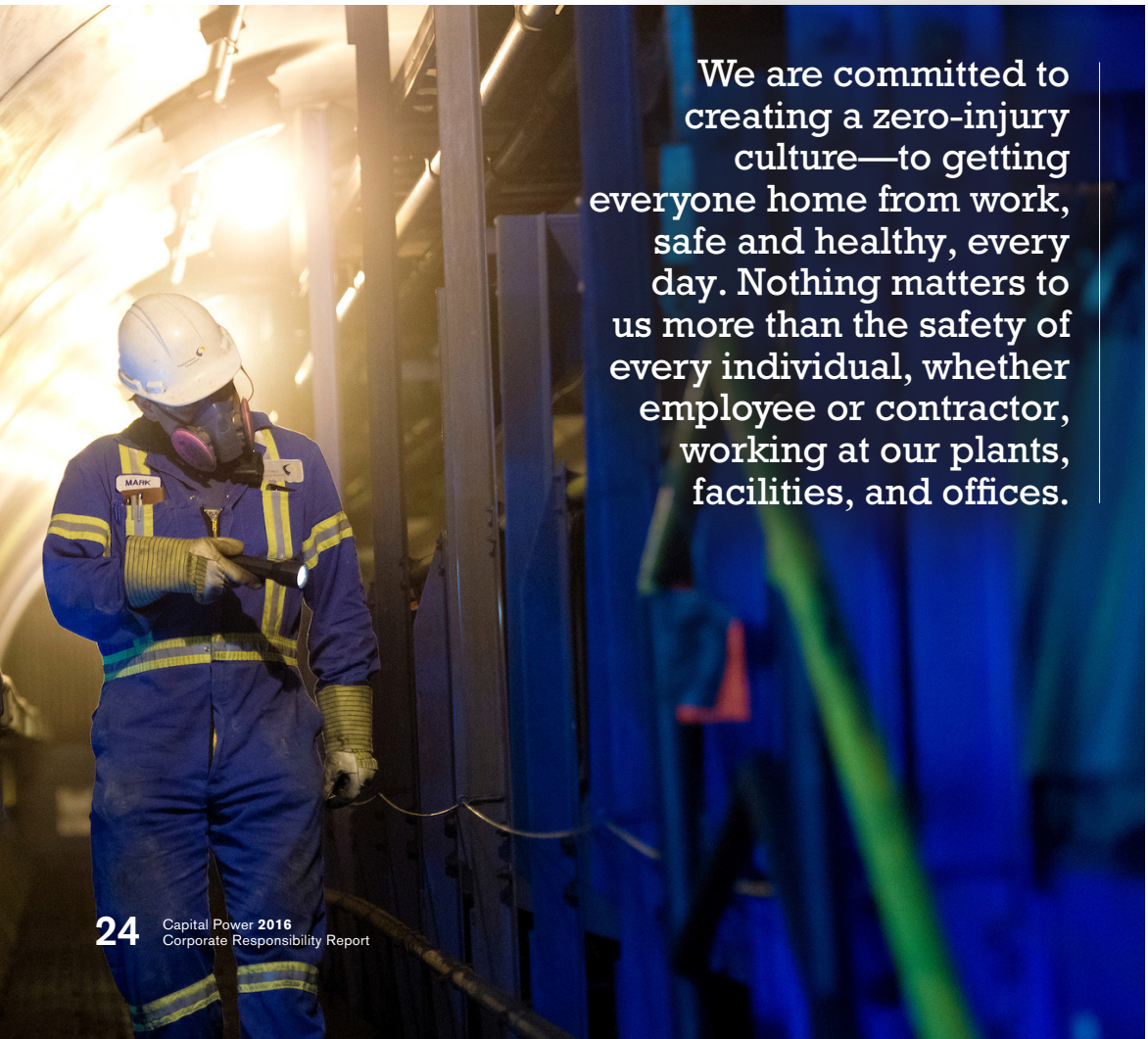
- thirteen complaints about respectful workplace and inappropriate behaviour; and
- two potential conflicts of interest.

In each instance, a thorough investigation was conducted by the Chief Compliance Officer. Of the 15 cases, one case was substantiated and disciplinary action taken. The remaining 14 cases were investigated and determined to be unsubstantiated. None of the cases involved fraud.

SAFE TODAY, SAFE TOMORROW

Our Zero Means Everything strategy focuses on both workplace and lifestyle safety, with emphasis on keeping safety top-of-mind both at and away from work. By continually examining our processes and training and identifying areas for improvement, we strengthen our safety culture and increase our efficiency and productivity. We establish and monitor safety targets, maintain equipment, and equip employees with necessary safety training, appropriate tools, and protective equipment to safely and successfully complete their work.

In 2016, we met our target of zero major and zero critical health and safety incidents and achieved zero lost-time incidents for both employees and contractors, making 2016 our safest year to date.



We are committed to creating a zero-injury culture—to getting everyone home from work, safe and healthy, every day. Nothing matters to us more than the safety of every individual, whether employee or contractor, working at our plants, facilities, and offices.

Our approach to health and safety:

- Establish clear goals and monitor our performance.
- Work and live a zero-injury and incident culture.
- Promote healthy and balanced lifestyles.
- Identify and manage health- and safety-related risks within operations, maintenance, and construction activities.
- Require and encourage reporting of hazards and near-miss events.
- Comply with applicable laws and regulatory requirements.
- Continually review and improve the company policy.
- Align our contractors with our company policy.

We prepare

WE:

Contingency planning

Our company-wide and site-specific contingency planning prepares our people, offices, and facilities for emergencies. By ensuring our teams' and the communities' safety, our plants can operate responsibly during and after an emergency.

Crisis management

Our senior executives and subject matter experts are ready to engage at times of crisis if our operations, profitability, or reputation are at significant risk due to a real or perceived threat to our employees, the environment, the community, our contractors, our assets (offices, facilities, and systems), or our partners.

Emergency response

Our emergency response planning includes activities, tasks, programs, and systems designed to preserve life and protect property and the environment. In 2016, all our facilities met their planned exercise and sustainment objectives.

WE PRACTICE

Every year, we practice our emergency response plans. We conducted four emergency exercises at Genesee in 2016, with a debrief after each to capture lessons learned and identify deficiencies for correction:

- A medical drill to test internal notification process, response time, and patient care skills for the given scenario.
- A plant evacuation drill to test evacuation time and accuracy.
- A tornado shelter-in-place drill to test our shelter-in-place mustering process, public announcement system notification, and remote handheld scanner that allows us to track and account for all personnel on site during an emergency.
- An emergency response team training drill.

WE RECOGNIZE

Annually, we recognize and reward safety performance and improvements in our plants. Our annual President's Safety Award recognizes facilities, projects, and support services that achieve exceptional and sustained safety performance. The awards are based on hours worked in the period and recognize the size and risk diversity across our operations. In 2016, seven of our offices and facilities were recognized with a President's Safety Award.

WE PROVIDE TRAINING

In 2016, we met legislative requirements by having 102 employees trained or recertified in Standard First Aid CPR with Automated External Defibrillator. In total, we had 244 employees with up-to-date certification.

We rolled out a mandatory two-day Health, Safety and Environment (HSE) Management System fundamentals training for all operations, construction, and engineering supervisors and leaders to provide base knowledge of the development and implementation of our HSE management systems.

WE ARE RECOGNIZED

At year-end, we celebrated more than two years without a lost-time incident. Capital Power was recognized with the Canadian Electricity Association's President's Award, recognizing top safety performing companies in the electricity sector.

An eye on the storm

In 2016, Hurricane Matthew threatened three of our North Carolina facilities. We initiated our crisis management plan and collected information on the storm from a variety of sources, including the United States National Hurricane Center. A total of 12 updates were provided to the facilities. Meanwhile on the ground, our operation teams concentrated on planning and preparing for the storm.

Canadian awards for safety

Received the Canadian Electricity Association (CEA) President's Award of Excellence for Employee Safety (gold level)

Received the CEA Vice-President's Award of Safety Excellence for Generation (bronze level)

LISTENING AND ENGAGING

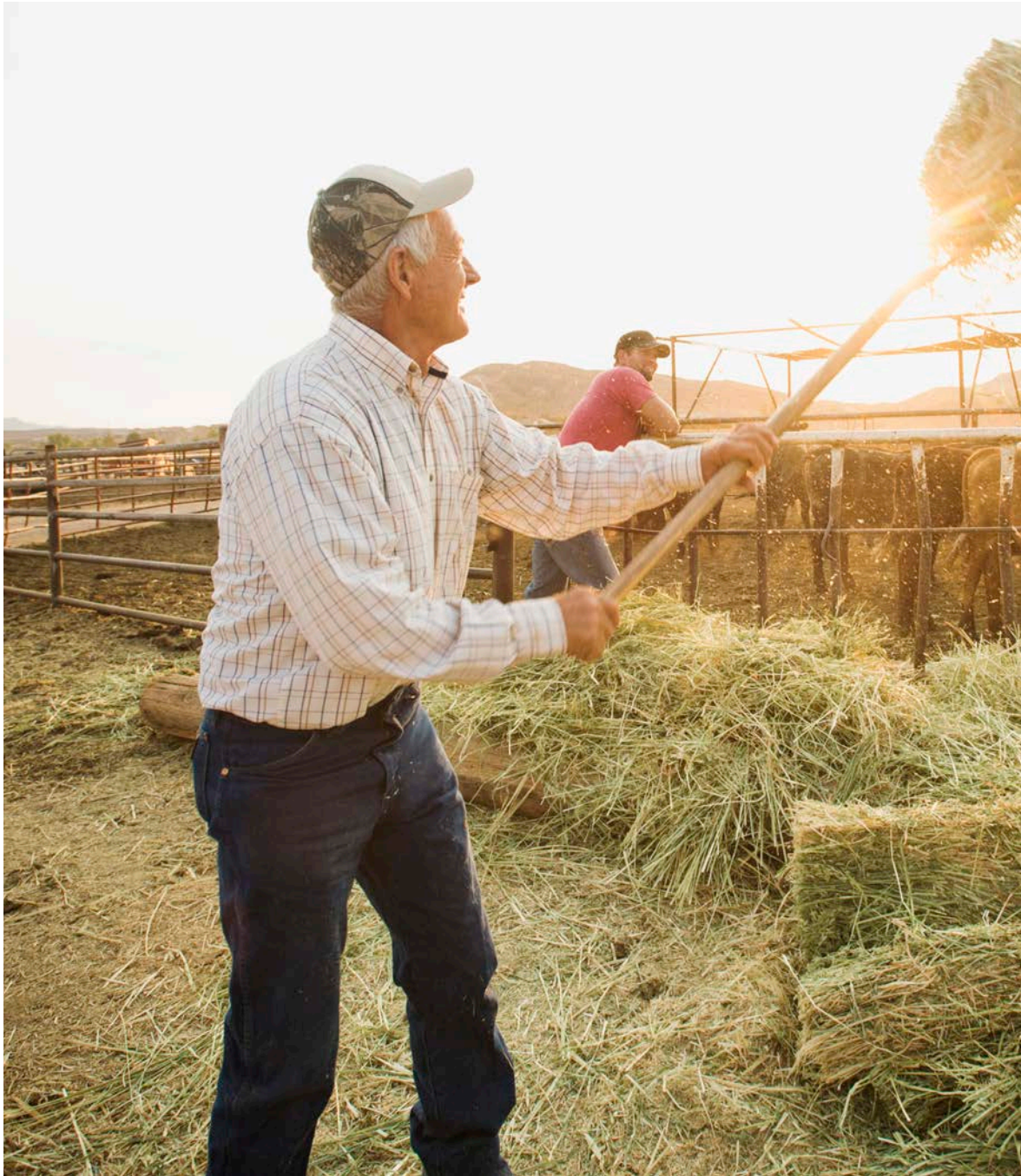
Stakeholder engagement

We strive to build and operate power generation facilities in ways that align with the interests and priorities of the community. We listen to and engage with our stakeholders to understand and consider their interests and priorities as we make decisions on how to minimize impact of our facilities, build new facilities for the future, and give back.

HIGHLIGHTS

- Completed a **Community Benefits Agreement** that includes support for a post-secondary scholarship for Historic Saugeen Métis members.
- Reached a **coal phase-out agreement** and a **Power Purchase Arrangement settlement** with the Government of Alberta.
- Completed our second **employee engagement survey** with a 90% participation rate.
- Completed discussions with the Grand River Post-Secondary Education Office regarding a **scholarship** for the Haudenosaunee Youth.
- We meet, or exceed, regulated requirements for **public participation** and hold regular landowner dinners and provide project update newsletters.

For full GRI reporting data, view the supplemental information found in the Global Reporting Initiative Index starting on page 45.



HOW WE ENGAGE

We work to collaborate, inform, listen and learn from, and with, our stakeholders. We focus on being open and transparent about what we are doing and planning by explaining the reasons behind our actions and plans and creating positive outcomes and results to build a strong, mutually beneficial, sustainable future. We work to be available and accessible to all our stakeholders.

WHO WE ENGAGE WITH

- Government
- Employees
- Local communities
- Investors and shareholders
- Indigenous communities

Government

By working with policy makers on the transition to a lower-carbon future, we achieved the following:

- Reached a coal phase-out agreement.
- Reached a Power Purchase Arrangement settlement.
- Contributed to and will continue to contribute to discussions with the Government of Alberta on the evolution to a capacity market.
- Provided input to the Government of Canada on the development of coal-to-gas conversion standards, the continued reliability of Canada's electricity grid, and the planning for critical electricity infrastructure.
- Reached out to our landowners and neighbours in the United States through meetings and community-level discussions at our renewable projects in Ohio, Illinois, and Wisconsin.
- Engaged directly with members of the State Legislature in Ohio and North Dakota on renewable energy policy in both states.
- Worked through industry associations such as the American Wind Energy Association, the Edison Electric Institute and the New England Council to engage with members of the Congress (Senate and House) to provide input on the United States' energy policy on Capitol Hill.

Employees

- We engage with our employees through CEO site visits and leadership meetings held several times a year, and through annual employee events and weekly news.
- In September 2016, a new collective agreement was reached with the International Brotherhood of Electrical Workers (IBEW) Local 1007 representing 113 employees at Genesee.
- There are three Canadian labour unions in four bargaining units, which together represent 39% of Capital Power's Canadian labour force and approximately 34% of Capital Power's overall work force.

We seek stakeholder alignment across all of our projects and operations. Where there is misalignment, we seek ways to overcome it in constructive ways.

Local communities

- Currently, our development initiatives are focused on wind facilities. Our engagement with local communities begins early and continues throughout project development to build and maintain positive relationships.
- We meet or exceed regulated requirements for public participation by way of holding open houses and engagement sessions and providing regular communication through project update newsletters and municipal Council presentations. Common questions and feedback received relate to:
  - > health and safety;
  - > infrastructure location;
  - > noise and sound;
  - > wildlife, birds, and bats; and
  - > visual impacts and property values.

To address the concerns above, we seek out related expert, independent, scientifically researched information and provide stakeholders with easy access to third-party, highly-credible scientific sources and government regulations.

Investors and shareholders

- We meet with investors throughout the year in major cities in Canada and the United States and hold an annual Investor Day and an Annual Meeting for shareholders.
- The meetings provide an opportunity to communicate public information on our strategy, financial outlook, and industry developments and to receive direct feedback from our investors and shareholders.

Indigenous communities

- We regularly engage Indigenous communities in discussions about our operations, nurture connections, and support events that are important to the community. We work to address potential impacts from our operations to treaty rights, Aboriginal rights, or other Indigenous interests.
- We have created and are partners in community benefits agreements (CBAs), which include financial and other community development support for multiple Indigenous communities.

Ongoing Indigenous engagement

Sharing information about facilities, such as operational updates, environmental reports, and other details as requested

In-person meetings

Supporting community events

Funding scholarships

We hold a vision where government, the private sector, Indigenous peoples, civil society, and citizens work together in a spirit of partnership and mutual respect.

We are witnessing a historical transformation in our industry and are coming together with stakeholders to provide input in developing a responsible plan to reduce emissions while stimulating our economy, diversifying energy sources, and creating more jobs.

Scholarships

We support three scholarships for members of the McLeod Lake Indian Band, Saulteau First Nations, and West Moberly First Nations. In developing provisions for these scholarships, we worked with these communities to ensure they had full discretion to award funding based on need and interests of their members. Funding for these scholarships will be offered throughout the 25-year operational life of the Quality Wind facility.

We completed discussions with the Grand River Post-Secondary Education Office (GRPSEO) regarding a scholarship for the Haudenosaunee Youth. We worked closely with the GRPSEO to develop the terms of the scholarships to ensure this met student interests and needs.

Through our partnership with K2 Wind, we support a scholarship for members of the Historic Saugeen Métis (HSM) who are engaged in post-secondary study. This scholarship is part of a Community Benefits Agreement completed with the HSM in 2016.

For our future:

A STRONG PAST, A STRONGER FUTURE

As we look to the future, we see an increase in the need for cleaner, less emission-intensive fuel sources. And we see our role as essential.

Features

Our power generation

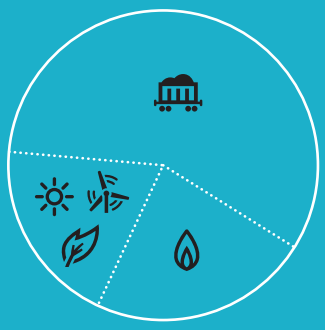
As a developer and operator of large-scale generation facilities, we're not just producing power, we're contributing to the economy, collaborating with communities and stakeholders, and planning for the protection of our environment.

Over the past several years, through development and acquisition, our portfolio[1] has grown to include a larger share of lower-emission energy sources—primarily additional natural gas and wind generation, in addition to solar and an increased role for biomass. As of the date of publication, Capital Power's owned-interests[1] in generation capacity totalled 4,500 MW, of which 49% were from natural gas, 31% from coal, and 20% from renewables.

2013

- **Coal** 57%
- **Natural gas** 23%
- **Renewables** 19%
  - **wind**
  - **solar**
  - **biomass/ solid fuels**

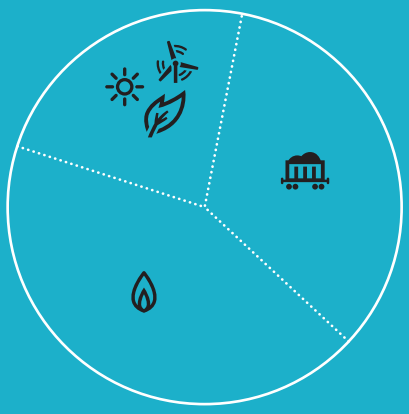
Total megawatts owned:
3,023 MW



2016

- **Coal** 43%
- **Natural gas** 34%
- **Renewables** 23%
  - **wind**
  - **solar**
  - **biomass/ solid fuels**

Total megawatts owned:
3,217 MW



1 Portfolio percentages are for Capital Power's owned generation capacity. Owned capacity differs from the scope used for emissions and energy production in this report (see pages 48-49, GRI:3.9 for details). The 2013 data includes Capital Power's then-371 MW ownership interest in the Sundance PPA.

$452 million

Our operations and developments contribute to a sustainable economy and a reliable future. We work to hire and use supplies and services locally. In 2016, we paid to our top 25 suppliers $452 million, $84 million (19%) of which was spent in the communities[2] where we build and operate.

$32 million

As a landowner and business, our property and income taxes contribute to community tax bases and toward improving roadways, infrastructure, and community services. In 2016, we paid $32 million in income and property taxes.

2 Local spending is defined as the destination and supplier site both being in the same jurisdiction.

Bloom Wind

PRODUCING POWER AND CONTRIBUTING TO THE ECONOMY

Since 2012, we've added six new wind facilities and our first solar facility. We're working to expand our renewables fleet throughout North America, and on June 1, 2017 commercial operations began at our Kansas Bloom Wind facility, our most-recent wind development.

BY THE NUMBERS

54
TURBINES

178
MW

54K
PROVIDE ENERGY TO 54,000 HOUSEHOLDS IN KANSAS

228
PEOPLE AT PEAK CONSTRUCTION

264K
HOURS WORKED

$11M
SPENT LOCALLY ON MATERIAL COSTS AND SERVICES

~$30M
LABOUR SPENT

~$500K
PER YEAR IN LIEU OF TAXES TO FORD AND CLARK COUNTIES

$28K
IN COMMUNITY DONATIONS

$180K
PER YEAR TO THE MINNEOLA SCHOOL DISTRICT BEGINNING IN 2018

$500K
TO SUPPORT PRESERVING LESSER PRAIRIE CHICKEN (FORMERLY THREATENED SPECIES)

Capital Power

PRODUCING CLEANER ENERGY

We are focused on the development of cleaner technologies for our facilities and on expanding our portfolio of contracted renewable and thermal generation.

At our existing operations, we are lowering our carbon emissions by conducting regular maintenance practices and optimizing our plant operations.

Produced power from 18 facilities[1]

- 43% coal
- 34% natural gas
- 18% wind
- 4% biomass/ solid fuels
- 0.7% solar
- 0.3% landfill gas

* X 5 X 1

Added five wind projects and one solar project since 2011, increasing from one wind facility (40 MW) in 2011 to 552 MW[2] in 2016.

Energy consumption in 2016

- Natural gas consumption increased by 16% due to higher demand at our Clover Bar Energy Centre and planned outages at Genesee, which resulted in increased start-up conditions, which utilize natural gas.
- Coal consumption decreased by 3%. This is largely due to two planned outages at Genesee, which resulted in approximately 4% less generation at Genesee for the year.
- Wind generation decreased by just under 3% due to variations in wind speed.
- Beaufort Solar had its first full year of operations, which generated a little over 29,000 MWh from solar energy.

Investments in a lower-carbon future

2012

Halkirk Wind: 150 MW

Quality Wind: 142 MW

2013

Port Dover and Nanticoke Wind: 105 MW

2014

Element Power: portfolio of wind and solar energy development sites located in the United States

Macho Springs Wind: 50 MW

Genesee 4 and 5: announced joint arrangement to build and operate

2015

Beaufort Solar: 15 MW

K2 Wind: 90-MW interest

Shepard Energy Centre: 400-MW interest

2016

Bloom Wind: construction commenced

2017 (first half)

Bloom Wind: 178 MW

3 natural gas facilities:

Decatur Energy Center: 795 MW

York Energy Centre: 200 MW

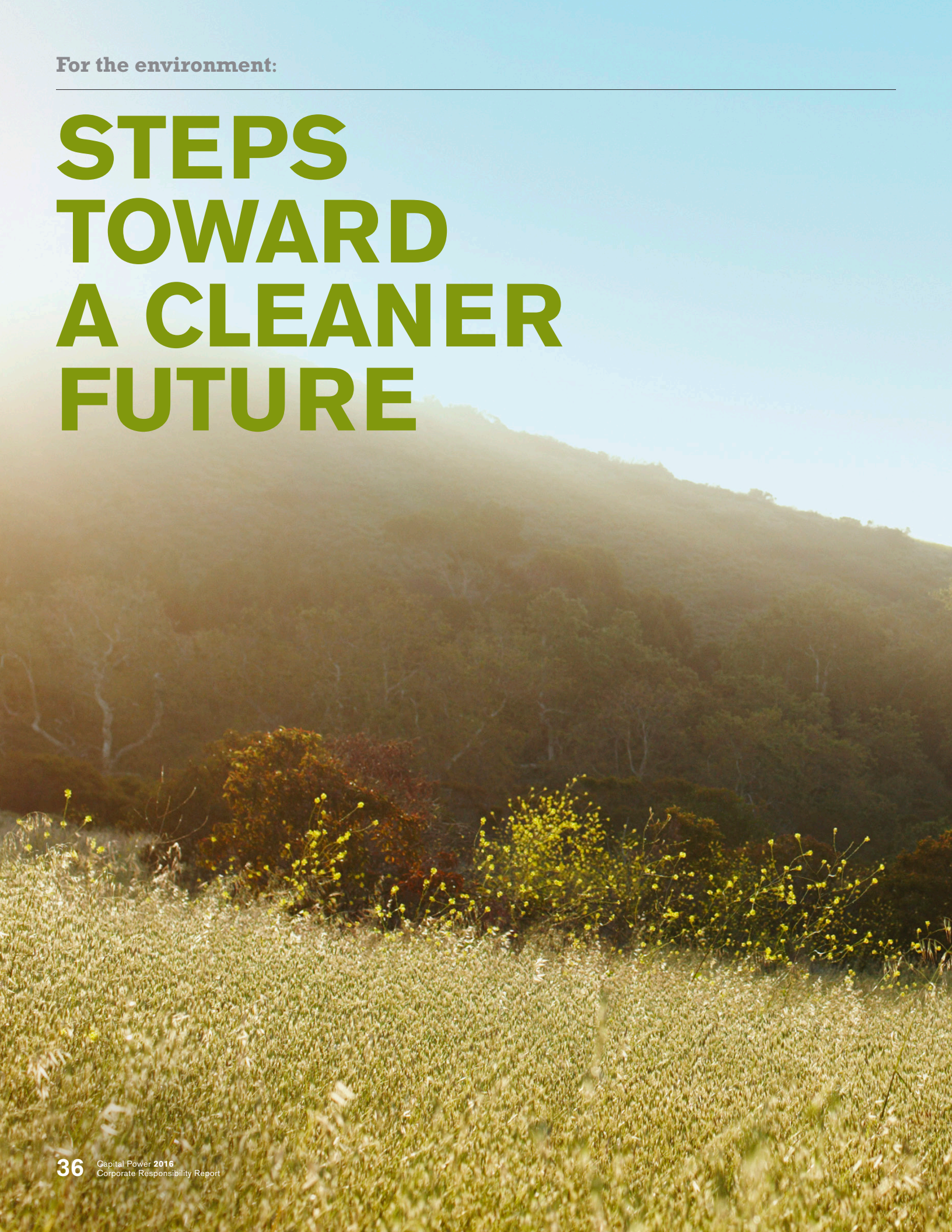
East Windsor Cogeneration Centre: 84 MW

2 waste heat facilities: 10 MW

1 As of December 31, 2016; includes facilities that Capital Power owns and operates.
2 Megawatts represent owned wind and solar generation capacity.

For the environment:

STEPS TOWARD A CLEANER FUTURE

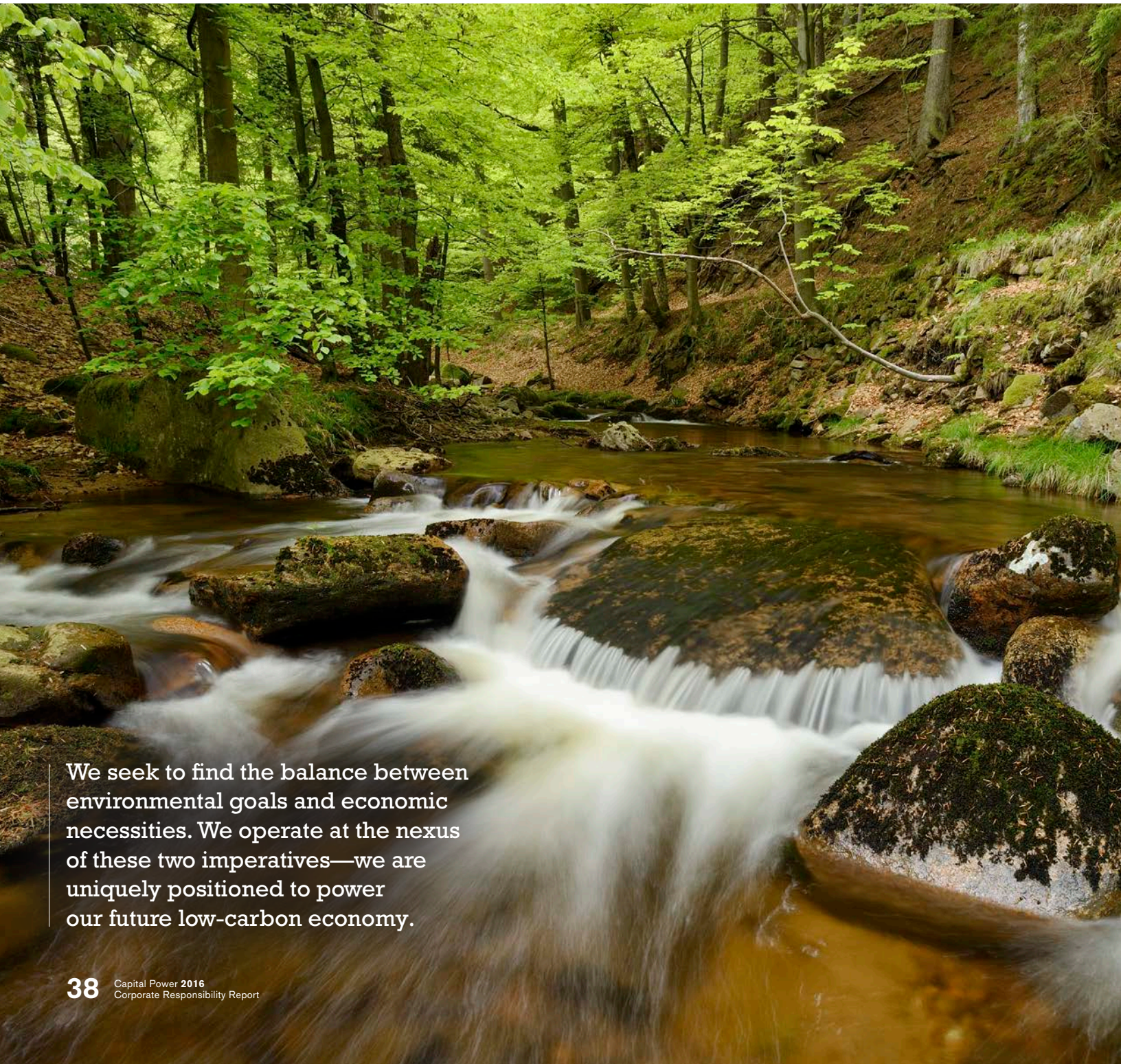


We work together with employees, shareholders, communities, regulators, governments, and environmental organizations to build a strong and healthy future.

Features

FOR THE ENVIRONMENT

The world of energy is changing. We are committed to optimizing our facilities to lower emissions and to building new lower-carbon facilities for the future.



We seek to find the balance between environmental goals and economic necessities. We operate at the nexus of these two imperatives—we are uniquely positioned to power our future low-carbon economy.

We support university scientists and engineers in both basic and applied research through an ongoing partnership with the University of Alberta's Canadian Centre for Clean Coal/ Carbon and Mineral Processing Technologies.

Capital Power's Alberta operations greenhouse gas reduction targets

Emissions intensity reduction targets

	2016	2017	(Estimated) 2018-2030[3]	2031
Genesee 1 and 2 (subcritical coal)	Reduce or offset emissions intensity by 15% or pay $20 per tonne to an emissions management fund.	Reduce or offset emissions intensity by 20% or pay $30 per tonne to an emissions management fund.	Reduce emissions intensity by ~64% or pay $30 per tonne through a carbon levy.	Reduce coal emissions by 100%.
Genesee 3[1] (supercritical coal)	Reduce or offset emissions intensity by 15% or pay $20 per tonne[2] to an emissions management fund. Additional reduction to 54% through offsets.	Reduce or offset emissions intensity by 20% or pay $30 per tonne[2] to an emissions management fund. Additional reduction to 54% through offsets.	Reduce emissions intensity by ~58% or pay $30 per tonne through a carbon levy.	Reduce coal emissions by 100%.
Clover Bar Energy Centre (natural gas)	Reduce or offset emissions intensity by 13% or pay $20 per tonne into an emissions management fund.	Reduce or offset emissions intensity by 20% or pay $30 per tonne to an emissions management fund.	Reduce emissions intensity by ~29% or pay $30 per tonne through a carbon levy.	Reduce emissions intensity by 29%.

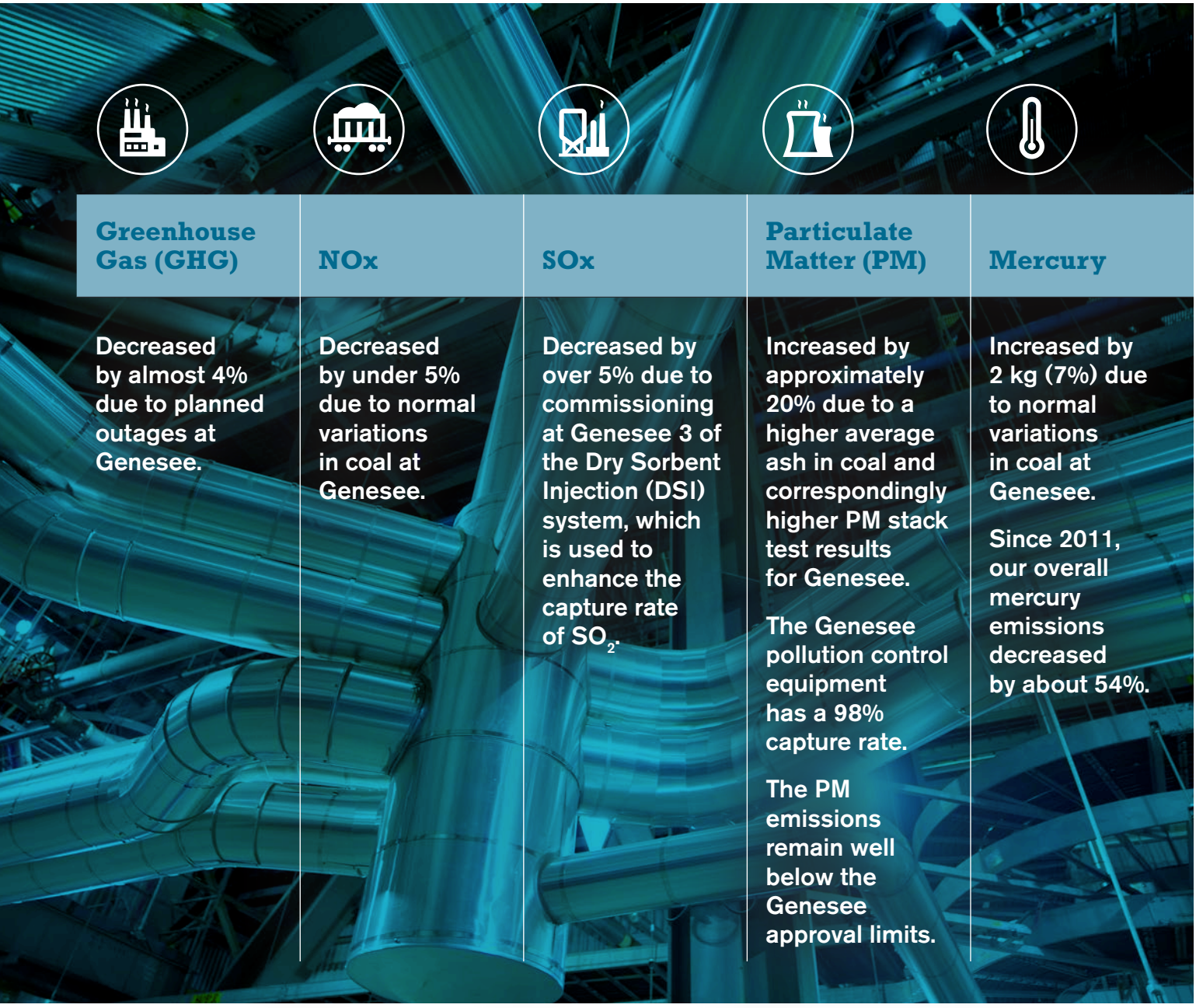
1 In 2017, Genesee 3 is required to meet two emission reduction targets. In aggregate, the two targets require Genesee 3 emissions to be reduced or offset 54% from the facility's original baseline emissions intensity. The Specified Gas Emitters Regulation requires a 20% reduction in 2017. This reduction must be achieved through improved facility performance, the retirement of qualifying Alberta-based offsets, the application of emission performance credits, and/or payment to an emissions management fund. The Genesee 3 facility license also requires that any remaining emissions be offset to the level of a combined cycle natural gas unit.

2 Payment to an emissions management fund is only available as a compliance option for the portion of the reduction required by the Specified Gas Emitters Regulation (reductions of 15% and 20% from 2016–2017). The remaining reduction requirement must be met through either improved facility performance or the retirement of qualifying offsets.

3 Reduce emissions to the level of a yet to be established performance standard, through performance improvements or eligible qualifying offsets. The cost of the carbon levy is expected to increase over time, and future regulation may prescribe the portion of the reduction obligation eligible to be met through carbon levy payments or offset retirements.

OUR EMISSIONS[1]

2015-2016



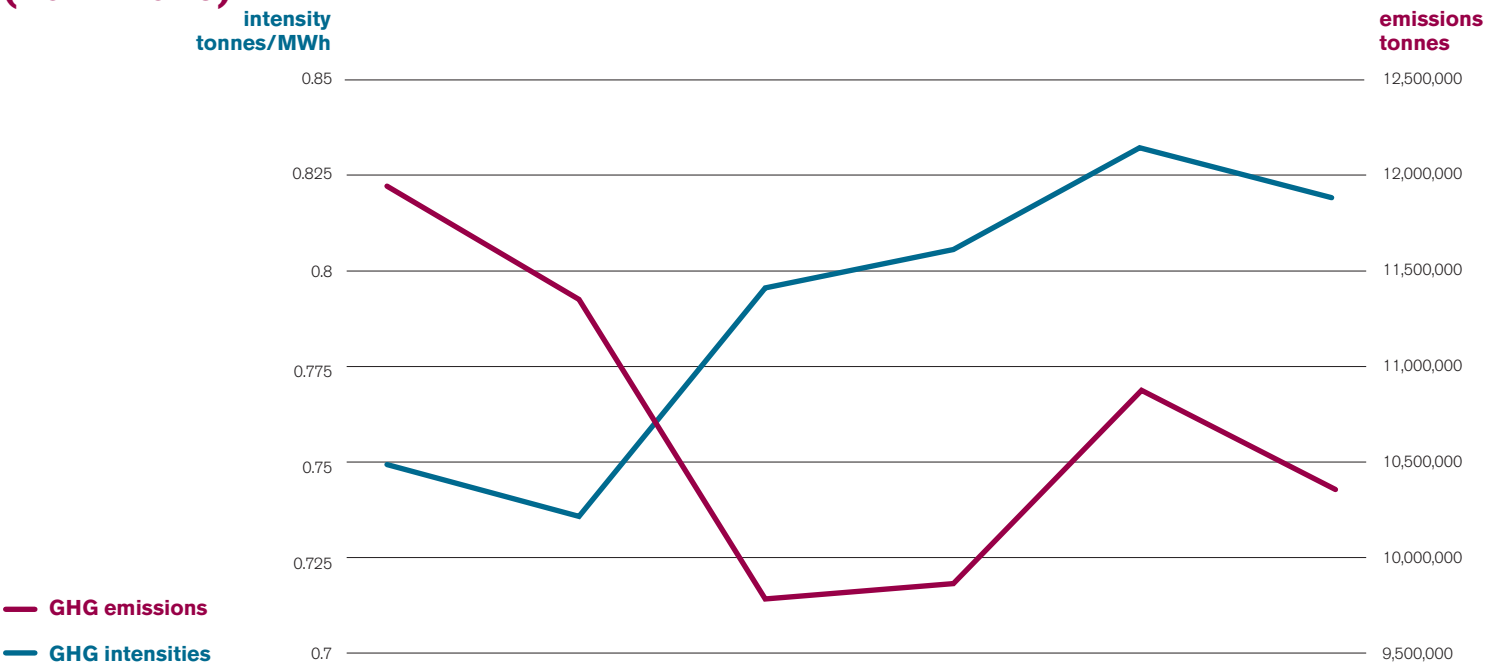
Greenhouse Gas (GHG)	NOx	SOx	Particulate Matter (PM)	Mercury
Decreased by almost 4% due to planned outages at Genesee.	Decreased by under 5% due to normal variations in coal at Genesee.	Decreased by over 5% due to commissioning at Genesee 3 of the Dry Sorbent Injection (DSI) system, which is used to enhance the capture rate of SO_2.	Increased by approximately 20% due to a higher average ash in coal and correspondingly higher PM stack test results for Genesee. The Genesee pollution control equipment has a 98% capture rate. The PM emissions remain well below the Genesee approval limits.	Increased by 2 kg (7%) due to normal variations in coal at Genesee. Since 2011, our overall mercury emissions decreased by about 54%.

1 Emissions data only accounts for plants that Capital Power operates: As of December 31, 2016, Capital Power had ownership in 18 power generation facilities located throughout North America. Of the 18 facilities, Capital Power operates 14 and the information presented above only represents the facilities that are operated by Capital Power. Data from owned capacity at Keephills 3, K2 Wind, Joffre Cogeneration and the Shepard Energy Centre are not included because we do not hold the operating permits for those facilities.

From 2011 to 2016:

- Compared to 2011, overall emissions intensity at the facilities we operate increased from 0.75 tonnes/MWh to 0.82 tonnes/MWh. The sale of our New England natural gas assets in 2013 reduced the share of lower-emission natural gas facilities in our operating portfolio.
- Compared to 2011, overall GHG emissions at the facilities we operate decreased by over 12% as a result of the sale of the New England assets in 2013 and the outage schedule for Genesee in 2016.
- Since 2011, our mercury emissions decreased by about 54%. This is largely due to updated emission factors for our North Carolina facilities and a mercury emission control system that was installed at Genesee in 2011.

GHG and air emission performance (2011-2016)



	2011	2012	2013	2014	2015	**2016**
GHG emissions tonnes CO_2e	11,919,000	11,397,000	9,744,000	9,859,000	10,843,000	10,451,000
GHG emissions intensity tonnes CO_2e/MWh	0.75	0.73	0.79	0.81	0.83	0.82
NO_x emissions tonnes	17,000	15,000	15,800	15,200	15,300	14,600
SO_2 emissions tonnes	20,200	19,500	21,400	21,800	22,800	21,600
PM emissions tonnes	1,455	1,560	1,540	1,600	1,500	1,800
Mercury emissions kg	69	65	58	30	30	32

- Emission values represent direct emissions from power generation operations and all numbers, except mercury, are rounded to the nearest hundred.
- Emissions intensities include only power generation operations. Emissions intensities do not include emissions from indirect sources, such as those resulting from electricity usage at our offices. Intensity is calculated using the net production (MWh) from all our facilities, including all renewable and fossil fuel facilities.
- GHG emissions intensities are stack emissions only and do not reflect the impact of offsets.
- In accordance with the *Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard* [World Resources Institute and World Business Council for Sustainable Development (2004)], carbon dioxide released at facilities from combustion of biomass and landfill gas are not included in emissions totals and intensities.

OFFSETTING CARBON EMISSIONS

We are an industry leader in the carbon offsets market and, in 2016, held one of the largest inventories of Alberta offsets. In the past decade, we have invested more than $100 million in permanent offsets, which are registered, audited, and verified by independent third-parties.

Our facilities must comply with legislated emission regulations, which set emission standards based on fuel type for existing and new generation. In Canada, programs are increasing in cost and stringency, which will accelerate the transition to cleaner electricity sources, including renewables.

In Alberta, we comply with the Specified Gas Emitters Regulations (SGER), which is in place to reduce Alberta's greenhouse gas emissions, and are preparing to comply with the Carbon Competitiveness Regulation, due to take effect in 2018.

We have invested more than $100 million in registered carbon offsets.

Meeting our emission reduction obligations in Alberta

Each year, to meet our GHG compliance obligations, we retire offsets or pay into an emissions management fund that supports initiatives to reduce GHG emissions.

	2011	2012	2013	2014	2015	**2016**
Annual compliance obligation[1] (MT CO_2e)	1.6	2.1	2.0	1.9	2.2	1.4
Offset usage[2] (MT CO_2e)	1.6	2.1	1.7	1.9	1.6	0.9
Paid to emissions management fund (MT CO_2e)	0.0	0.0	0.3	0.0	0.6	0.5
	100% Compliance					

To meet SGER emission mitigation requirements, our compliance options include: physically reducing emissions, retiring eligible GHG offsets or Emission Performance Credits, or paying into the Climate Change and Emissions Management Corporation's Technology Fund, widely referred to as the "Tech Fund".

In 2016, we invested more than $15 million in Alberta-based offsets that reduce local GHG emissions and which we can use to meet current and future requirements.

- Offsets come from a broad portfolio of offset projects, including biofuel production, energy conservation, wind generation, N_2O abatement, acid gas injection, landfill gas, agricultural nitrous oxide emissions reduction, and conservation cropping.
- We paid into the Technology Fund at $20/t$CO_2e$ to meet Capital Power's 2016 SGER compliance while actively investing in Alberta-based SGER-eligible GHG offsets intended for future compliance use.

1 Includes compliance obligation at owned facilities in Alberta (but excluding contractually allocated emissions obligations) and contractually allocated emissions obligations for Alberta assets.
2 SGER and other eligible offsets.

CARING FOR OUR LAND

We protect the places where we live and work and monitor for long-term effects in the air, land, water, fish, and wildlife.

Biomonitoring to manage impacts

Since 2004, we have worked with the TransAlta Generation Partnership and invested approximately $4.3 million in a $14 million comprehensive biomonitoring and associated air monitoring program.

The biomonitoring program measures and assesses potential changes in environmental concentrations of chemicals of potential concern associated with aerial and water emissions from the generating plants. The results today show no appreciable increases or trends across sampled media and locations.

We also conduct a wildlife monitoring program every five years, with the last survey completed in 2015 and submitted to Alberta Environment and Parks (AEP) in 2016.

Survey says

Total ungulate population (primarily large mammals) decreased, which is not attributed to habitat change as suitable ungulate habitat in the survey area did not show a significant decrease between 2010 and 2015. It is possible that the decrease is related to the increase in predators, such as cougars.

Western toads, a species classified as sensitive to human activity by AEP, have been detected at higher frequencies in all three monitoring years relative to the 2005 baseline survey and have been observed to breed in altered or reclaimed habitats within the Genesee Mine.

Three new species were observed: ring-billed gull, three-toed woodpecker, and Wilson's warbler. All survey years, including the 2005 baseline year, have shown a relatively high number of diverse bird species supported by wetland, deciduous, and mixed wood forest habitats.

Protecting birds and bats

Bird and bat surveys help us understand the impact of wind power generation on these species living and traveling nearest to our operations. Wildlife biologists conduct local surveys on our behalf.

At our Port Dover and Nanticoke (PDN) Wind and Halkirk Wind facilities, we have been working to protect migratory birds and bats through changes to our operational practices, with a special focus on migration periods. The results from these multi-year programs show that the mortality rate of birds and bats at these two wind facilities were below regulatory thresholds. Due to this success, we are voluntarily continuing to implement these operational practices to reduce the impact to wildlife near and around the PDN and Halkirk facilities in 2017.

RESPECT RECLAIM REUSE

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 have focused on reclaiming mined land back into farmland in addition to reforestation and wetland development. This helps create a balance and diversity of landscape and land uses and provides diverse habitats for the many species that populate the area.

40 hectares reclaimed in 2016, with a total of 984 hectares of land reclaimed at Genesee.

The power of native plants

In 2016, we partnered with NAIT's Boreal Research Institute to conduct reforestation research activities at the Genesee Mine. The multi-year project kicked off with greenhouse trials at NAIT's Peace River research facility and focused on methods to propagate root material of desirable native plant species and determine which can be planted in tree seedlings' soil plugs when still in the greenhouse. The companions, or tag-a-long plants, offer a twofold benefit: reducing competition from invasive agricultural weeds while introducing native species that help create a natural ecosystem.

Cattle grazing for local farmers

We lease our land that is not yet used for mining operations to local farmers who bring their cattle to our grasslands to be managed by professional cowboys.

In 2016, 1,800 cattle belonging to 11 local farmers grazed at the 6,000-acre community pasture at Genesee.

Reducing landfill by recycling fly ash

Genesee produces fly ash, a by-product from coal production that is often sent to landfills. In 2016, we recycled 44% of the fly ash produced from Genesee 1 and 2. It was sold for use in concrete production across western North America. Using one tonne of fly ash from Genesee 1 and 2 as a substitute for one tonne of Portland Cement in the manufacture of concrete reduces carbon dioxide emissions (a greenhouse gas) by approximately one tonne.

Testing revealed Genesee 3 fly ash could also be suitable for use in cement and concrete products. We aim to sell Genesee 3 fly ash in 2017.

Restoring the land to its roots

In 2016, we received final reclamation certificates from the Alberta Energy Regulator (AER) on 398 hectares of land in the Genesee Mine, including our first reforested area. This brings our total reclamation certified lands to 436 hectares.

This significant milestone is the final confirmation that our mine reclamation initiatives are sound and leave the land in equal to or better than condition than before mining.

REPORT SCOPE AND GLOBAL REPORTING INITIATIVE (GRI) INDEX

About this report

In our constant pursuit of transparency and clarity, we took a two-part approach with this year's report: an illustrated corporate narrative in the front to more clearly tell our story, focus on material information, and provide highlights and examples, and a back-end data section to provide additional reporting and data related to each of the applicable GRI indicators.

Committed to transparent and balanced reporting

This report provides a detailed overview of Capital Power in 2016, including our successes and challenges. Keeping our commitment to producing an accurate annual record of how we have 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.

We aim to report about our business in a manner that presents a holistic view of our business and shows the connection between our business strategy and our corporate responsibility program. Building on our past reports, we aim to be clear and concise in providing accurate and balanced information about our people, facilities, performance (including emissions), and our contributions to the communities where we do business. All dollar figures are in Canadian funds.

Global Reporting Initiative

Our 2016 Corporate Responsibility Report follows guidelines defined in the Global Reporting Initiative (GRI 3.1), an international 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. GRI has launched its G4 Guidelines, which Capital Power is assessing for future reports.

GRI INDEX

The following Index lists each GRI indicator with its description and Capital Power's information and data to meet that indicator and/or a report page number where that information is found. References are found on www.capitalpower.com.

GRI indicator and descriptor	Capital Power's disclosure/performance	page(s)/ reference
Strategy and analysis		
1.1 Statement from President and CEO		1
1.2 Key impacts, risks, and opportunities		8, 10, 11
Organizational profile		
2.1 Name of organization	Capital Power.	NA
2.2 Products	*2016 Annual Report, 2016 Annual Information Form* and *2017 Management Proxy Circular.*	Inside cover
2.3 Operational structure	*2016 Annual Report, 2016 Annual Information Form* and *2017 Management Proxy Circular.*	Inside cover
2.4 Location of headquarters	Edmonton, Alberta, Canada.	Inside cover
2.5 Number of countries where organization operates	Two: Canada and United States.	Inside cover
2.6 Nature of ownership	*2016 Annual Report, 2016 Annual Information Form.* See GRI Indicators 3.6-3.9	48
2.7 Markets served	*2016 Annual Report, 2016 Annual Information Form.*	Inside cover

Data and details

GRI indicator and descriptor	Capital Power's disclosure/performance	page(s)/ reference
2.8 Scale of the organization		**Inside cover, 15, 35, 40, 50, 59, 68**
2.9 Significant changes		**5, 6, 7, 8, 10, 11, 32, 34, 35**
2.10 Awards		**Front cover, 5, 6, 14, 15, 25**
Report parameters		
3.1 Reporting period	Provides data for the most-recent six full years of operation: 2011, 2012, 2013, 2014, 2015 and 2016. Data for each year is for the 12-month period starting January 1 and ending December 31, respectively.	**46**
3.2 Date of previous report	August 2016.	**NA**
3.3 Reporting cycle	Report annually on our corporate responsibility and sustainability.	**NA**
3.4 Contact for questions		**2, back cover**
3.5 Process for defining content	Report builds on an extensive process for defining content, including stakeholder consultation, which resulted in guidelines for determining priority topic areas and materiality. We also incorporated feedback received following the release of our previous reports.	**NA**
3.6 Boundary of report **3.7** Limitations on scope **3.8** Basis for reporting on joint ventures, subsidiaries, etc. **3.9** Data measurement techniques	This report includes energy production and environmental performance data from power plants for which Capital Power held the operating permit in 2016, 2015, 2014, 2013, 2012, and 2011. Data from each plant represents the entire plant—not only our financial share of the operation. This includes: • Genesee 3: co-owned with TransAlta. • Genesee 1 and 2: plant capacity and output is sold under an Alberta Power Purchase Arrangement to the Alberta Balancing Pool. Energy production and emissions data from Keephills 3, Joffre, K2 Wind, Shepard Energy Centre, and former power purchase arrangement (PPA) facilities are generally not included because we do not hold the operating permits. Capital Power terminated its Sundance C Power Purchase Arrangement on March 24, 2016. Ownership interests in generation capacity are also included and footnoted accordingly to define the distinction.	

GRI indicator and descriptor	Capital Power's disclosure/performance	page(s)/ reference
3.9 Data measurement techniques (Cont'd)	One of the challenges of preparing this report is the need to synthesize data from numerous jurisdictions with unique reporting requirements, methods, and standards. Where possible, information has been consolidated (e.g. greenhouse gas emission (GHG) data for our facilities in Canada and the United States). In other areas, information is presented separately or from a single jurisdiction. Carbon dioxide emissions from our landfill gas and biomass facilities are not included in aggregate GHG emission totals or emission intensity calculations. This approach aligns with the *Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard.* **Other reporting** Other public disclosures, particularly the *2016 Annual Report, 2016 Annual Information Form,* and *2017 Management Proxy Circular,* include detailed content that responds to certain GRI indicators. The content is incorporated by cross-reference throughout the report. The documents are also available at *www.sedar.com* and *www.capitalpower.com.* Our Canadian power plants operating above a certain emission-level threshold publicly file annual reports with *Canada's National Pollutant Release Inventory.* In 2016, residents living near Genesee received a single issue of the *Genesee Station Connection* newsletter, which provides information about the facility's emission performance and other topics related to plant and mine operations. We also distributed newsletters for residents living near the proposed Black Fork Wind (Ohio), Cardinal Point (Illinois) and Bloom Wind (Kansas) projects.	
3.10 Effects of any restatements of information in previous report	No restatements.	NA
3.11 Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report	No significant changes.	NA

Governance, commitments and engagement

Found on our website at *www.capitalpower.com.*

4.1 Governance structure	Refer to our *Corporate Governance Policy, Board Diversity Policy and Committee Terms of Reference* and our *2017 Management Proxy Circular.*	NA
4.2 Function of the Chair	The function of the Chair of the Board of Directors is available in the *Corporate Governance Policy, Chair's Terms of Reference* and our *2017 Management Proxy Circular.*	NA
4.3 Independent and/or non-executive board members	The Chair of the Board is independent. Additional information is available in our *2017 Management Proxy Circular.*	NA

Data and details

GRI indicator and descriptor	Capital Power's disclosure/performance	page(s)/ reference
4.4 Mechanisms for shareholder and employee input	*See section: With our people, we succeed.* • Covered in our *Corporate Governance Policy, Board Shareholder Engagement Policy* and *2017 Management Proxy Circular.*	14-15
4.5 Compensation and performance	Refer to our *Corporate Governance Policy* and *2017 Management Proxy Circular.*	NA
4.6 Conflicts of interest process	Refer to our *2017 Management Proxy Circular, 2016 Annual Information Form,* and our *Individual Policy Director's Terms of Reference.*	NA
4.7 Process for determining qualifications	Refer to our *2017 Management Proxy Circular* and *Corporate Governance Policy.*	NA
4.8 Mission, values, codes of conduct	**Our Mission** Capital Power's business is the development, acquisition, construction, operation, and optimization of large-scale, fuel-diverse, cost-effective power generation facilities in North America. **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 **Codes of conduct** • *Corporate Governance Policy* • *Board Diversity Policy* • *Board Shareholder Engagement Policy* • *Ethics Policy* • *Respectful Workplace Policy* • *The Capital Power Corporation Code of Conduct Regulation Compliance Plan*	NA
4.9 Procedures for overseeing performance, risks and opportunities	Refer to our *Corporate Governance Policy* and our *2017 Management Proxy Circular.*	NA
4.10 Process for evaluating board performance	Refer to our *2017 Management Proxy Circular* and our *Corporate Governance Policy.*	NA
4.11 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.	NA

GRI indicator and descriptor	Capital Power's disclosure/performance	page(s)/ reference
4.13 Association memberships	Alberta Chamber of Resources Alberta Enterprise Group American Public Power Association Association of Power Producers of Ontario Arizona Competitive Power Alliance Association of General Counsel of Alberta American Wind Energy Association Boston College Center for Corporate Community Relations Building Owners and Management Association Edmonton Business Council of British Columbia Calgary Chamber of Commerce Canadian Clean Power Coalition Canadian Electricity Association Canadian Wind Energy Association Catalyst Canada Inc C.D. Howe Institute CEATI International Clean Energy BC Conference Board of Canada Construction Owners Association of Alberta Decentralised Energy Canada Edison Electric Institute Edmonton Chamber of Commerce Energy Marketing Credit Group EXCEL Partnership Group Globe Foundation Huron Chamber of Commerce Huron Manufacturing Association Inc Independent Electricity System Operator Independent Power Producers Society of Alberta International Association of Business Communicators International Emissions Trading Association Leduc Regional Chamber of Commerce Macomb Area Economic Development Corporation Northern Alberta Risk and Insurance Management Society Niulpe of North Carolina Rocky Mountain Institute Safety Codes Council Strathcona Industrial Association Tax Executives Institute The Legal Forum The New England Council United States Endowment for Forestry Western Power Trading Forum	NA
4.14 Stakeholders engaged	*See section: Listening and engaging.* • Government • Employees • Local communities • Investors/shareholders • Indigenous communities	27-28
4.15 Basis of identifying stakeholders	*See section: Listening and engaging.*	26
4.16 Approaches to stakeholder engagement	*See section: Listening and engaging.*	26-28
4.17 Key topics and concerns	*See section: Listening and engaging.*	26-28

GRI indicator and descriptor	Capital Power's disclosure/performance	page(s)/ reference

EN1
Materials used

Energy/materials consumption (Gigajoules/Tonnes)

Year-over-year variance is primarily due to fuel mixture, the number of operating hours of each facility, acquisitions and developments, and the sale of the hydro facilities and the New England natural gas facilities in 2012 and 2013, respectively.

14-15

		2011	2012	2013	2014	2015	**2016**
Coal	GJ	101,776,000	94,917,000	97,696,000	99,039,000	108,772,000	104,091,000
	Tonnes	5,215,000	4,916,000	5,152,000	5,054,500	5,343,000	5,173,000
Natural gas	GJ	42,096,000	43,021,000	5,621,000	4,297,000	3,250,000	3,776,000
	Tonnes	N/A	N/A	N/A	N/A	N/A	N/A
Biomass	GJ	4,514,000	5,952,000	5,996,000	6,572,000	6,295,000	6,866,000
	Tonnes	395,000	532,000	576,500	596,500	533,000	562,000
Tire-derived fuel	GJ	2,030,000	2,279,000	4,050,000	5,690,000	6,843,000	6,630,000
	Tonnes	59,000	72,400	125,000	176,400	210,000	201,000
Landfill gas	GJ	360,000	371,000	233,000	244,000	281,000	283,000
	Tonnes	N/A	N/A	N/A	N/A	N/A	N/A

The data above represents Capital Power's generation associated with its operating approvals rather than its financial share of the operation. As of December 31, 2016, Capital Power had ownership in 18 power generation facilities, located throughout North America. Of the 18 facilities, Capital Power operates 14 and the information presented below only represents the facilities that are operated by Capital Power. Data from owned capacity at Keephills 3, K2 Wind, Joffre and the Shepard Energy Centre are not included because we do not hold the operating permits for these facilities.

EU1
Installed capacity, broken down by primary energy source and by regulatory regime

For information on the production capacity, energy source, location, and ownership interests for Capital Power's 18 facilities, see the tables provided in *Capital Power's 2016 Annual Information Form*, and the *2016 Annual Report*.

NA

GRI indicator and descriptor	Capital Power's disclosure/performance	page(s)/ reference

EU2
Net energy output broken down by primary energy source and by regulatory regime

EN3
Direct energy consumption

Net Production by Energy Source

MWh	2011	2012	2013	2014	2015	**2016**
Coal	9,887,000 (62%)	9,366,000 (60%)	10,034,000 (82%)	9,770,000 (80%)	10,519,000 (80%)	10,114,000 (80%)
Natural gas[2]	5,375,000 (34%)	5,468,000 (35%)	588,000 (5%)	450,000 (4%)	338,000 (3%)	386,000 (3%)
Hydro[1]	139,000 (1%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Solar[3]	0 (0%)	0 (0%)	0 (0%)	0 (0%)	300 (0.002%)	29,000 (0.2%)
Biomass	279,000 (2%)	412,000 (3%)	392,000 (3%)	410,000 (3%)	397,000 (3%)	421,000 (3%)
Wind	102,000 (0.6%)	192,000 (1%)	1,005,000 (8%)	1,221,000 (10%)	1,377,000 (11%)	1,339,000 (11%)
Tire-derived fuel	125,000 (0.8%)	157,000 (1%)	263,000 (2%)	356,000 (3%)	428,000 (3%)	405,000 (3%)
Landfill gas	32,000 (0.2%)	32,000 (0.2%)	15,000 (0.1%)	13,000 (0.1%)	7,000 (0.1%)	6,000 (0.05%)
Net production[4] (MWh)	15,939,000	15,626,000	12,297,000	12,220,000	13,066,000	12,701,000
Gross production (MWh)	16,949,000	16,610,000	13,461,000	13,146,000	14,062,000	13,665,000
Electricity consumed by station services (MWh)	1,010,000	984,000	1,164,000	926,000	996,000	963,000

1 We no longer generate electricity from hydro since the sale of our two hydroelectric facilities in 2012.
2 Electricity generated from natural gas in 2013 decreased from 2012 due to the sale of our New England facilities in November 2013.
3 In December of 2015, we completed the construction of Beaufort Solar, a 15-MW solar facility in North Carolina, therefore, solar production was recorded for the last week of the year in 2016.
4 Production (MWh) includes both electricity and exported steam. Steam production was converted from 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.

35

EN5
Energy saved – conservation

We added five wind projects and one solar project since 2011, increasing from one wind project (40 MW) in 2011 to 552 MW[1] in 2016.

See page 35 for generation from renewables.

1 Megawatts represent owned wind and solar generation capacity.

34-35

EU5
Allocation of CO_2 emissions allowances or equivalent, broken down by carbon trading framework

For 2016, we were not allocated any allowances in any Carbon Trading framework (California, Quebec, Ontario, or RGGI), as we do not own any covered entities in those regions.

NA

GRI indicator and descriptor	Capital Power's disclosure/performance	page(s)/ reference

EN8
Total water withdrawal

EN9
Water sources affected

EN10
Water recycled

EN21
Total water discharge

EN25
Water bodies and habitat affected by discharged water

Water use at our generation facilities serves two major purposes: cooling and steam production. Steam is used to create electricity and is also used by industrial customers.

For the most part, our steam systems are close-looped, which allows us to conserve as much water as possible. This means water is heated into steam, condensed back into water, and reused. Cooling water systems are similar yet may draw from an external water source and discharge back into that source where permitted.

Most of our water consumption originated from Alberta operations. Water sources include municipal, recycled, and river water.

NA

Approximate water withdrawals and discharges (Megalitres)

	2011[1]	2012	2013[2]	2014[3]	2015[4]	**2016**[5]
Water withdrawn	38,600	40,800	35,200	36,700	33,300	25,400
Water discharged	29,000	32,600	23,600	28,900	20,700	14,700
Water consumed (= Water withdrawn - Water discharged)	9,600	8,200	11,600	7,800	12,600	10,700

1 2011 water withdrawal and discharge statistics do not include water displaced by hydroelectric facilities. As of December 31, 2012, Capital Power did not own or operate any hydroelectric facilities.
2 In 2013, the water supply at the Genesee pump house located near the North Saskatchewan River was compromised as a result of flooding; water was retained in the cooling pond, which decreased the overall water discharged (to the North Saskatchewan River) and increased the overall water consumption.
3 2014 performance returned to 2011 and 2012 levels, with the exception of a decrease in withdrawals due to the sale of the New England natural gas assets in November 2013.
4 Discharge at Genesee was limited in 2015, which resulted in increased overall consumption for the year. Water was retained in the Genesee cooling pond due to operational needs.
5 In 2016, water withdrawn decreased largely due to record rain, which reduced the need for diversion and blowdown at Genesee.

GRI indicator and descriptor	Capital Power's disclosure/performance	page(s)/ reference
EN11 Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	The Genesee pump house is located on the south bank of the North Saskatchewan River, which is adjacent to a wildlife corridor.	NA
EU11 Average generation efficiency of thermal plants by energy source and by regulatory regime	• 33% Genesee 1 and 2 (subcritical coal) • 40% Genesee 3 (supercritical coal) • 46% Island Generation (combined-cycle natural gas) • 36% Clover Bar Energy Centre (simple-cycle natural gas) • 25% Southport and Roxboro (solid fuels) Thermal efficiency compares how much energy an operator gets out of a plant versus how much energy was put in. The Clover Bar Energy Centre is a peaking facility—it has frequent startups and shutdowns, which leads to lower efficiency. The North Carolina facilities have older stoker-fired boilers in which the fuel burns on a moving grate in the furnace. The North Carolina facilities, commissioned in 1987, use a stoker boiler technology that is less efficient than Capital Power's subcritical and supercritical thermal facilities in Alberta.	NA
EN12 Impact on biodiversity **EU13** Biodiversity of offset habitats compared to the biodiversity of the affected areas **EN14** Managing impacts on biodiversity	*See sections: Caring for our land and Respect, reclaim, reuse.* The landscapes around our operations are integral to the biodiversity of the regions in which we operate. We conduct extensive monitoring programs at our Genesee operations and the Wabamun-Genesee region to better understand the potential impacts of power generation on biodiversity. We also conduct detailed environmental monitoring and assessments for wildlife, species specific to the area, and plant species to understand the biodiversity and protect the land and livelihood of the area.	43-44

GRI indicator and descriptor	Capital Power's disclosure/performance	page(s)/ reference
EN15 ICUN Red List species	Our operations do not affect any wildlife on the International Union for Conservation of Nature and Natural Resources Red List species list.	NA
EN16 GHG emissions by weight **EN 20** NOx, SOx, other emissions by weight	**Emissions intensities**	40-41

Intensity	2011	2012	2013	2014	2015	**2016**
tonnes CO_2e/MWh	0.75	0.73	0.79	0.81	0.83	0.82
kg NOx/MWh	1.06	0.96	1.28	1.25	1.17	1.15
kg SO_2/MWh	1.27	1.25	1.74	1.78	1.74	1.70
kg PM/MWh	0.09	0.10	0.13	0.13	0.11	0.14
mg Hg/MWh	4.34	4.16	4.75	2.46	2.28	2.52

Emissions intensities are calculated based on the power generation from the facilities we operate. Emissions intensities do not include emissions from indirect sources, such as those resulting from electricity usage at our offices. Intensity is calculated using the net production (MWh) from all our facilities, including all renewable and fossil fuel facilities.

GHG emissions intensities are stack emissions only and do not reflect the impact of offsets.

Total air emissions

Emissions	2011	2012	2013	2014	2015	**2016**
tonnes CO_2e	11,919,000	11,397,000	9,744,000	9,859,000	10,843,000	10,451,000
tonnes NOx	17,000	15,000	15,800	15,200	15,300	14,600
tonnes SO_2	20,200	19,500	21,400	21,800	22,800	21,600
tonnes PM	1,455	1,560	1,540	1,600	1,500	1,800
kg Hg	69	65	58	30	30	32

Values represent direct emissions from power generation at the facilities we operate and all numbers, except mercury (Hg), are rounded to the nearest hundred.

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

GRI indicator and descriptor	Capital Power's disclosure/performance	page(s)/ reference
EN18 Initiatives to reduce GHGs	*See section: Crafting a resilient strategy: Navigating the transition to a lower-carbon future.*	4-8
EN19 Emissions of ozone-depleting substances by weight	No ozone-depleting substances were released in 2016.	NA
EN2 Percentage of recycled materials **EN22** Total weight of waste	**Ash recycling and disposal (tonnes)**	44

Ash	2011	2012	2013	2014	2015	**2016**
Created	1,300,000	1,226,000	1,372,000	1,207,000	1,164,000	1,192,000
Recycled	215,000 (17%)	231,000 (19%)	221,000 (16%)	196,000 (16%)	178,000 (15%)	170,000 (14%)
Landfilled	27,000	38,000	56,000	73,000	85,000	105,000
Mine-filled[1]	1,058,000	957,000	1,095,000	938,000	901,000	917,000

1 Ash mine-filled includes water for dust control when transporting to the mine.

GRI indicator and descriptor	Capital Power's disclosure/performance	page(s)/ reference
EN23 Number/volume of spills	**Reportable spills to land or water**	NA

2011	2012	2013	2014	2015	**2016**
1	3	4	0	0	0

GRI indicator and descriptor	Capital Power's disclosure/performance	page(s)/ reference
EN24 Weight of hazardous waste	We do not generate hazardous waste and we use contracted waste distributors to remove hazardous recyclables, such as oil, from our sites.	NA
EN13 Habitats protected/ restored	*See sections: Caring for our land and Respect, reclaim, reuse.*	43-44

GRI indicator and descriptor	Capital Power's disclosure/performance	page(s)/ reference

EN26
Initiatives to mitigate impacts of products/ services

In 2016, we reclaimed 40 hectares at the Genesee Mine, bringing the total amount of reclaimed land to 984 hectares, which includes farmland, reforested, and wetland areas. This previously-mined area is now 100% productive farmland and wildlife habitat.

Genesee Mine fully reclaimed – area and reclamation summary (hectares)

	2011	2012	2013	2014	2015	**2016**
Fully reclaimed[1]	680 (26%)	763 (29%)	847 (31%)	906 (33%)	944 (33%)	984 (34%)
Reclamation in progress[2]	320 (13%)	264 (10%)	298 (11%)	274 (10%)	296 (11%)	322 (11%)
Required for safe and efficient mining	1,581 (61%)	1,629 (61%)	1,566 (58%)	1,555 (57%)	1,600 (56%)	1,557 (55%)
Total land	2,581 (100%)	2,656 (100%)	2711 (100%)	2,735 (100%)	2,840 (100%)	2,863 (100%)

1 Fully reclaimed refers to land that is fully certified, to land parcels that have been applied for and are awaiting final certification from the Alberta Energy Regulator (AER), and to reclaimed land that is ready to apply to AER for certification.
2 Reclamation in progress means reclamation activities have begun but are incomplete and no application for certification has been filed.

44

EN28
Monetary value of fines and other sanctions for non-compliance with environmental laws

We are proud of our environmental performance and our transparency in reporting on our operations. In 2016, environmental performance was strong despite five recordable environmental incidents. There were five Notice of Violations (NOV) recorded in 2016. A total of $1,230 in fines were received for two of the NOVs. All incidents and violations were minor in nature and were closed with no further action required from the regulators.

NA

Social

Human rights

GRI indicator and descriptor	Capital Power's disclosure/performance	page(s)/ reference
HR1 Investment agreements with human rights clauses	We do not have significant investment agreements that include human rights clauses.	**NA**
HR2 Suppliers screen for human rights	Our contractors must align with our policies, although they do not undergo a specific screening on human rights.	**NA**
HR3 Employee training on human rights	*See section: Expecting the most of ourselves.*	**23**
HR4 Discrimination incidents	In 2016, we reviewed: • 13 complaints about respectful workplace and inappropriate behaviour. • two potential conflicts of interest. In each instance, a thorough investigation was conducted by the Chief Compliance Officer. Of the 15 cases, one case was substantiated and disciplinary action taken. The remaining 14 cases were investigated and determined to be unsubstantiated. None of the cases involved fraud.	**23**
HR5 Protecting freedom of association/ collection bargaining	The right to free association and collective bargaining is not at significant risk at Capital Power.	**27, 62, GRI:LA4**
HR6 Child labour issues	Our operations are not at risk for incidents of child labour.	**NA**
HR7 Forced labour issues	Our operations are not at risk for incidents of forced labour.	**NA**
HR8 Security personnel trained in human rights policies	All security personnel receive training in policies and procedures related to human rights.	**23**
HR9 Incidents/ violations regarding Indigenous peoples	No human rights violations, including the rights of Indigenous people, were identified.	**28, 29**
HR10 Number of human rights reviews/impact assessments	We have not been subject to human rights reviews or any impact assessments.	**NA**

GRI indicator and descriptor	Capital Power's disclosure/performance	page(s)/ reference
HR11 Grievances related to human rights	No human rights grievances were received.	23

Labour practices and decent work

LA1 Total workforce

	2011	2012	2013	2014	2015	**2016**
Total number of employees company-wide[1]	892	910	697	698	679	668
Permanent full-time employees	878	899	684	686	666	652
Permanent part-time employees	14	11	13	12	13	16
Temporary/ provisional full-time and part-time	20	23	12	14	11	12
Casual employees	7	3	5	6	4	7
Long-term disability	8	8	9	6	5	8

1 Consists of full- and part-time employees only, as of December 31, 2016.

NA
See also LA13. Page 63

LA2 Employee new hires/turnover rate

Number and percentage of new hires by country

	2011	2012	2013	2014	2015	**2016**
Canada	115 (80.4%)	106 (78.5%)	69 (86.3%)	112 (89%)	67 (84%)	23 (70%)
United States	28 (19.6%)	29 (21.4%)	11 (13.8%)	14 (11%)	13 (16%)	10 (30%)

Company-wide turnover rates

	2011	2012	2013	2014	2015	**2016**
Company-wide	11.5%	12.2%	38.3%	11.7%	10.9%	5.8%

Turnover rates

- Union: 3%
- Non-union: 8%
- Gender:
  - Female: 7%
  - Male: 6%
- Age:
  - Under 35: 6%
  - 35-49: 6%
  - 50+: 5%

Turnover reason

- Dismissal: 0.3%
- Gross misconduct: 0.0%
- Shortage of work: 0.0%
- Unsuccessful probation: 0.0%
- Resignation: 3.1%
- Retirement: 0.6%
- Other: 1.8%

NA

GRI indicator and descriptor	Capital Power's disclosure/performance	page(s)/ reference
LA3 Benefits	*See section: Compensation and benefits.*	16
LA4 Collective bargaining	The labour unions we work with are in Canada (IBEW 1007, CSU 52, UNIFOR 829 and UNIFOR 1123) and, together, represent 39% of our labour force in Canada and 34% of our overall workforce (224 union employees).	27
LA5 Notice periods for operational changes	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.	NA
LA6 Workforce in health and safety committees	Our plants' and offices' active health and safety committees monitor and provide advice on occupational health and safety issues. Fifty-eight employees (or over 10% of our employee workforce) served on five health and safety committees.	NA
LA7 Injuries, diseases	We use the Total Recordable Injury Frequency (TRIF) calculation as one of the main measurement tools to evaluate our employees' and contractors' annual safety performance. TRIF includes lost-time incidents, restricted work, and medical-aid injuries that occurred during a calendar year, for every 200,000 hours worked. We also use the Lost Time Injury Frequency (LTIF) and Lost Time Injury Severity (LTIS) measures. In 2016, we met our target of zero major and zero critical health and safety incidents and achieved a combined (employee and contractor) TRIF of 0.68, making 2016 our safest year to date. Incidents that counted towards our TRIF were minor, with 75% being contractor-related. Our HSE Index and its underlying measures remained consistent with those established in 2014, but we additionally refined and enhanced targets to focus on contractor management. By continuing to focus on specific indicators in 2017, we are intending to nurture a healthier and safer workplace. **TRIF/LTIF/and LTIS showing year-over-year trend**	NA, 24
LA8 Education and support for disease prevention	*See section: With our people we succeed.* *See section: Benefits and compensation.* *See section: Safe today, safe tomorrow.*	14, 15, 16, 24

	2011	2012	2013	2014	2015	**2016**
TRIF	1.44	1.46	0.96	0.16	0.10	0.68
LTIF	0.54	0.22	0.21	0.08	0.00	0.00
LTIS	14.7	8.7	9.0	0.99	0.00	0.00

GRI indicator and descriptor	Capital Power's disclosure/performance	page(s)/ reference
LA9 Health and safety topics in trade union agreements	Safety is widely accepted by our trade unions as being of utmost importance. The following are some examples of the types of health and safety topics covered in our trade union agreements: • Appointed representatives of the Company and IBEW shall meet on a regular basis to discuss and, if required, recommend changes regarding Safety Rules and Regulations. • IBEW employees are not required to perform any hazardous task with which they're not familiar or which cannot be accomplished without violation of safety practices and such refusal shall not be the basis for disciplinary or discriminatory action. • An annual safety footwear subsidy will be provided by the Company up to a maximum of $500 in a calendar year.	NA
LA11 Skills management and lifelong learning	*See section: Learning and development.* • Capital Power School of Business • Strong Start Orientation and On-Boarding Program • Summer Work Experience Program for students • Self-Development • Talent Development Program	17
LA13 Composition of governance bodies and breakdown of employees by category	*See section: With our employees we succeed.* **Employee status** • Permanent full-time employees: 652 • Permanent part-time employees: 16 • Temporary/provisional full-time and part-time: 12 • Casual employees: 7 • Long-term disability: 8 **New hires by location** • Canada: 23 (70%) • United States: 10 (30%) **New hires by gender** • Female: 7 (21%) • Male: 26 (79%) **New hires by age** • Under 35: 14 (42.4%) • 35-49: 15 (45.5%) • 50+: 4 (12.1%) **Number of employees in management positions in Canada** • 128 **Number of employees in Management positions in the United States** • 12 At the end of 2016, the Board consisted of eight directors led by a non-executive chair and comprised six men and two women. At the date of publication, the Board consisted of 10 directors led by a non-executive chair and comprised seven men and three women.	15

GRI indicator and descriptor	Capital Power's disclosure/performance	page(s)/ reference
LA14 Ratio of basic salary of women to men	• Entry-level management: 14 women earned $90 per $100 earned by 41 men • Mid-level management: 11 women earned $97 per $100 earned by 50 men • Upper management: 6 women earned $82 earned per $100 earned by 18 men	NA
EU14 Programs and processes to ensure the availability of a skilled workforce	*See section: Learning and development.* • See LA11 (page 63)	17

EU15 Percentage of employees eligible to retire in the next five and 10 years, broken down by job category and by region	Eligible to retire in five years:
	• Total company-wide: 5.5% (37 employees)
	  • Management: 7.2% Canada: 6.5% United States: 0.7%
	  • Union: 3.6% Canada: 3.6% United States: NA
	  • Out of scope*: 14.1% Canada: 6.7% United States: 7.4%
	
	Eligible to retire in 10 years:
	• Total company-wide: 15.6% (105 employees)
	  • Management: 13.7% Canada: 12.9% United States: 0.7%
	  • Union: 14.7% Canada: 14.7% United States: NA
	  • Out of scope*: 37% Canada: 15.7% United States: 21.3%
	* Non-management, non-union hourly, and salaried employees.
		NA

EU16 Policies and requirements regarding health and safety of employees and employees of contractors and subcontractors	*See section: Safe today, safe tomorrow.* We developed 12 Life Safety Critical Standards (LSCS), which are associated with 10 Life Safety Critical Rules. Ten LSCS were released to the organization, with the remaining two scheduled for implementation in early 2017. The purpose of the Life Safety Critical Rules program is to prevent actions that have the potential to result in fatality or serious injury.	24, 25
EU17 Days worked by contractor and subcontractor employees involved in construction, operation and maintenance activities	More than 900,000 contractor hours were recorded in 2016.	NA
EU18 Percentage of contractor and subcontractor employees that have undergone relevant health and safety training	*See section: Safe today, safe tomorrow.* 100% of contractors must comply with our health and safety policies and procedures and must manage their health, safety, and environment (HSE) risks in a manner consistent with our company policy. We monitor health and safety performance as part of contractor selection and approval to perform or continue work.	24, 26

Social

Society

GRI indicator and descriptor	Capital Power's disclosure/performance	page(s)/ reference
SO1 Programs to manage impacts on communities	*See section: Thriving with our communities.*	20, 21, 22
EU19 Stakeholder participation in the decision-making process related to energy planning and infrastructure	*See section: Listening and engaging.* **Halkirk 2 Wind Project (H2)** We have worked to develop strong relationships with stakeholders through respectful, open, and transparent communication throughout the H2 Wind Project's development. We developed a Participant Involvement Program (PIP) that aligns with the Alberta Utilities Commission Rule 007. The intent of the PIP is to ensure that stakeholders: • gain a detailed understanding of the proposed Project; • have an opportunity to respond to Project information and provide comments; and • are aware of the channels available to provide additional input throughout the development process. The PIP included project-specific information packages sent to stakeholders within the regulated notification radius, two public open house sessions in October 2016, and direct consultation with those stakeholders directly or adversely affected by the project. Throughout the PIP, we received comments, questions, and concerns about the proposed project and incorporated this feedback into the design through the adaptation or modification to project design, movement of wind turbines or associated project infrastructure, and other considerations or actions undertaken on behalf of our company, where appropriate. In instances where a concern or request could not be accommodated, an explanatory response has been provided to the stakeholder. We plan to continue our PIP activities throughout 2017 and project development, following the submission of our facility application to the AUC.	26, 27, 28
EU20 Approach to managing the impacts of displacement	We draw on best practices in public consultation and actively consult with our stakeholders—particularly about new projects or existing facilities. Our operations may require the acquisition and displacement of land from local landowners. We are committed to negotiating with landowners, offering fair market value for land, and offering other forms of compensation, such as relocation costs and replacement costs for infrastructure.	NA
EU21 Contingency planning measures, disaster/ emergency management plan and training programs, and recovery/ restoration plans	*See section: Safe today, safe tomorrow.*	25
EU22 Number of people physically or economically displaced, and compensation, broken down by types of project	In 2016, no land acquisitions or displacement occurred.	NA

GRI indicator and descriptor	Capital Power's disclosure/performance	page(s)/ reference
EU25 Number of injuries and fatalities to the public involving company assets, including legal judgments, settlements and pending legal cases of diseases.	No injuries or fatalities involving company assets occurred.	NA
SO2 Percentage and total number of business units analyzed for risks related to corruption.	100% of our company, both facilities and offices, are analyzed for corruption.	NA
SO3 Employee training for anti-corruption	*See section: Expecting the most of ourselves.*	23
SO4 Actions taken in response to corruption incidents	*See GRI HR4*	60
SO5 Public policy positions and lobbying	*See section: Listening and engaging.*	26, 27, 28
SO6 Financial/in-kind contributions to political parties and politicians	Capital Power made no contributions to political parties or politicians in 2016, including provincial, state, and federal levels in Canada and the United States. Recent legislation in Alberta and Ontario prohibits corporate donations, as does Canadian federal legislation. Capital Power did not contribute to any political parties, candidates, or campaigns in BC.	NA
SO7 Legal actions for anti-competitive behaviour **SO8** Fines and sanctions for non-compliance with laws/ regulations	Our energy trading operations in Alberta are subject to the Fair, Efficient and Open Competition (FEOC) Regulation and Alberta Electric System Operator market rules and are monitored by the AESO and the Market Surveillance Administrator (MSA). All potential contraventions of market rules or FEOC violations are reviewed by our Compliance and Ethics Team to determine if they constitute a reportable event. Non-compliance or potential non-compliance incidents are taken very seriously. The majority of potential market rule and FEOC violations are brought to our attention internally and then filed with the MSA if determined to be non-compliant. The MSA will review suspected contraventions and will issue forbearance or a fine. There were two specified penalties for contraventions of AESO Independent System Operator Market Rules due to an information system error and a human error, respectively, which resulted in a total sum of $2,000 in penalties. When those types of events occur, corrective actions are taken to identify and address the root causes to prevent future recurrence.	NA

Product responsibility

GRI indicator and descriptor	Capital Power's disclosure/performance	page(s)/ reference
PR2 Incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services	There were zero incidents of non-compliance with regulations and voluntary codes concerning the health and safety of products and services.	**NA**
PR3 Type of product and service information	There were zero incidents of non-compliance with labelling requirements (the company has no products or services subject to labelling requirements).	**NA**
PR4 Incidents of non-compliance – labelling	There were zero incidents of non-compliance with product and service information. The company has no products or services subject to labelling requirements, produces wholesale electricity, and does not operate a mass market facing business.	**NA**
PR5 Customer satisfaction	Capital Power is not a Competitive Energy Retailer nor a Regulated Rate Provider and has no mass market business. As such, Capital Power does not have aggregated survey results. We do follow up annually with some of our large commercial customers about meeting performance measures.	**NA**
PR6 Marketing communications – laws	There were zero incidents of non-compliance related to marketing and advertising codes.	**NA**
PR7 Marketing communications – compliance	There were zero incidents of non-compliance related to marketing and advertising codes.	**NA**
PR8 Customer privacy	There were zero substantiated complaints regarding breaches of customer privacy or losses of customer data.	**NA**
PR9 Fines for non-compliance	*See GRI:SO8.*	**67**

GRI indicator and descriptor	Capital Power's disclosure/performance	page(s)/ reference

EC1
Economic value generated and distributed, including donations

EC2
Financial implications and risks for activities related to climate change

EC4
Financial assistance received from government

EC8
Impact of infrastructure investments and services for public benefit

EC9
Indirect economic impacts

The following information paints a picture of the economic contributions (cash inflows and outflows) received and paid by Capital Power in 2016.

4-8, 32-35

$millions	2011	2012	2013	2014	2015	**2016**
Cash inflows:						
Operating						
Revenues	1,911	1,197	1,416	1,099	1,245	1,114
Proceeds from sale of emission credits	20	42	43	33	63	49
Finance lease receipts	-	-	34	59	57	56
Distributions from Joint Venture	-	-	-	-	8	24
Income taxes recovered	-	-	19	11	-	-
Government assistance[1]	1	1	1	1	1	-
	1,932	**1,240**	**1,513**	**1,203**	**1,374**	**1,243**
Financing and investing						
Proceeds from issue of loans and borrowings	604	250	-	17	220	164
Proceeds from preferred shares issued	-	150	200	-	-	200
Proceeds from common shares issued	469	8	-	-	-	-
Proceeds from exercise of share options	-	-	-	24	2	-
Proceeds from sale of assets	131	116	569	2	2	-
Proceeds on sale and leaseback of generating facility	-	-	-	-	46	-
Interest received	2	7	3	2	4	1
	1,206	**531**	**772**	**45**	**274**	**365**
Foreign exchange	-	-	-	-	8	4
Cash inflows to the Company	**3,138**	**1,771**	**2,285**	**1,248**	**1,656**	**1,612**

1 We received approximately $1 million per year from the Government of Canada through the Wind Power Production Incentive program, which was created to encourage the development of wind energy capacity. The incentive was approximately $0.01 per kilowatt hour of production from our Kingsbridge Wind Power Project, which was commissioned in 2006. Eligible recipients can receive the incentive on the first 10 years of production. Capital Power received its last incentive payment as part of this program in March 2016.

GRI indicator and descriptor	Capital Power's disclosure/performance	page(s)/ reference

EC9
Indirect economic impacts (cont'd)

$millions	2011	2012	2013	2014	2015	**2016**
Cash outflows:						
Payments for energy and fuel	980	560	593	437	545	423
Operating expenses	219	196	167	162	186	180
Invested in property, plant and equipment and other assets	438	563	917	204	129	247
Purchase of emission credits	21	35	22	23	11	28
Total	**678**	**794**	**1,106**	**389**	**870**	**878**
Community investment	1	1	1	2	1.2	2
Business acquisitions	647	-	-	23	-	-
Settlement of Sundance PPA legal action	-	-	-	-	-	20
Settlement and termination of interest rate non-hedge contracts	-	-	-	-	-	9
Employee compensation and benefits	155	143	149	121	122	114
Payments to governments						
Income taxes	14	7	2	14	10	8
Property taxes	21	16	12	18	19	24
	35	**23**	**14**	**32**	**29**	**32**
Financing costs:						
Repayment of long-term debt	293	62	155	65	267	260
Interest and financing charges	122	89	93	87	94	80
Common shares purchased	-	-	-	-	121	22
Debt issue costs	5	3	1	-	1	1
	420	**154**	**249**	**152**	**483**	**363**
Investors						
Distributions to non-controlling interests	110	42	36	24	13	-
Dividends paid to common shareholders	51	62	62	68	106	143
Dividends paid to preferred shareholders	6	6	20	21	22	23
Preferred share dividends paid by subsidiary	11	-	-	-	-	-
Share issue costs	20	5	6	-	-	6
Total	**198**	**115**	**124**	**113**	**141**	**172**
Foreign exchange and other	7	1	2	9	8	4
Cash outflows to the Company's stakeholders	**3,121**	**1,791**	**2,238**	**1,278**	**1,647**	**1,594**

Economic

GRI indicator and descriptor	Capital Power's disclosure/performance	page(s)/ reference

EC3
Coverage of defined benefit plan obligations

Wages and compensation	2011	2012	2013	2014	2015	**2016**
Employees that are members of registered defined contribution plan in Canada	273	317	254	322	321	319
Canadian employees that are members of Local Authority Pension Plan (LAPP), a multi-employer defined benefit plan in Canada	446	402	338	336	306	284
Employees that are members of a 401(k) plan in the United States	136	145	78	112	93	100

NA

EC5
Range of ratios of entry-level wage compared to local minimum wage

Comparisons – wages	2011	2012	2013	2014	2015	**2016**
% workforce paid minimum wage						
- Company-wide	0%	0%	0%	0%	0%	0%
- Canada only	0%	0%	0%	0%	0%	0%
- United States only	0%	0%	0%	0%	0%	0%
Difference between our lowest starting wage and local minimum wage (Alberta)	$11.01	$10.44	$7.99	$7.74	$7.36	$6.82
# of employees earning lowest starting wage (national)						
- Company-wide	3	6	3	4	6	6
- Canada only	2	3	2	3	3	4
- United States only	1	3	1	1	3	2

NA

EC6
Policy, practices and proportion of spending on locally-based suppliers

EC7
Procedures for local hiring and proportion of senior management hired from local communities

See section: A strong past, a stronger future.

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EU8
R&D expenditures aimed at providing reliable electricity and promoting sustainable development

We support university scientists and engineers in both basic and applied research through an ongoing partnership with the University of Alberta's Canadian Centre for Clean Coal/Carbon and Mineral Processing Technologies.

We spent over $1.5 million toward finding innovative solutions to reduce coal use at our Genesee Generating Station in Alberta. We conducted large-scale biomass tests to see if biomass would work as a supplemental fuel source with coal to run the units. Based on the success of these tests, we are now developing a permanent biomass fuel system capable of replacing 15% of the fuel in a coal-fired unit. We also initiated a large-scale feasibility study, jointly with Alberta's forestry producers and Alberta Innovates, to evaluate the potential for re-fueling a coal-fired unit using 100% renewable biomass.

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GRI indicator and descriptor	Capital Power's disclosure/performance	page(s)/ reference

EU30
Average plant availability factor by energy source and by regulatory regime

Plant availability represents the percentage of time in the period that the plant was available to generate power, regardless of whether or not it was running. Plant availability by plant category was:

	Year ended December 31					
	2011	2012	2013	2014	2015	**2016**
Alberta commercial plants[1]	87%	92%	95%	94%	94%	92%
Alberta contracted plants	97%	94%	91%	93%	96%	96%
Ontario and British Columbia contracted plants	98%	98%	99%	98%	98%	98%
United States commercial plants[2]	88%	85%	87%	N/A	N/A	N/A
United States contracted plants	100%	93%	95%	93%	94%	95%

1 Excludes the results of the Sundance PPA.
2 Includes New England plants, which were sold in November 2013.

NA

Exclusions

GRI indicators not reported There are several 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.

GRI indicator and descriptor	Reason for not reporting
3.10 Effect of any restatements of information in previous report	No restatements occurred.
3.13 Assurance – Financial and emissions data are externally audited annually	Financial and emissions data are externally audited on an annual basis.
4.12 Externally developed charters (economic, environmental, social)	Capital Power does not have externally developed charters.
EU3 Number of customer accounts	Capital Power is not a Competitive Energy Retailer nor a Regulated Rate Provider and has no mass market business. (Capital Power does provide energy-related services to large commercial and industrial customers.)
EU4 Length of transmission lines	Capital Power does not operate transmission and distribution lines.
EU6 Management approach to ensure short and long-term electricity availability and reliability	Capital Power is an independent power producer and operates in markets where it does not have overall market responsibility for managing short- or long-term electricity availability or reliability.
EU7 Demand side management programs	Capital Power has no mass market power business and, therefore, no customer-facing demand management programs.
EU9 Provisions for decommissioning nuclear power sites	Not applicable. Capital Power does not operate or own any nuclear power generation.
EU10 Planned capacity against projected electricity demand over long-term	Capital Power is an independent power producer and operates in markets where it does not have overall market responsibility for managing short- or long-term electricity availability or reliability.
EU12 Transmission and distribution losses	Capital Power does not operate transmission and distribution lines.
EU23 Programs to improve or maintain access to electricity and customer support	Capital Power has no mass market power business and, therefore, no relevant customer programs.

GRI indicator and descriptor	Reason for not reporting
EU24 Practices to address barriers to accessing and safely using electricity and customer support services	Capital Power has no mass market power business and, therefore, no relevant customer practices.
EU26 Population unserved in licensed distribution or service areas	Not applicable. Capital Power does not provide transmission and distribution services.
EU27 Number of residential disconnections for non-payment	Capital Power has no mass market power business.
EU28 and EU29 Power outage frequency and duration	Not applicable. Capital Power does not provide transmission and distribution services.
EN4 Indirect energy consumption	Capital Power does not track this information, and emissions from indirect energy consumption is not material compared to direct emissions from operations.
EN6 and EN7 Initiatives to reduce indirect energy consumption	Capital Power does not currently collect this data.
EN17 Other greenhouse gas emissions by weight	Not material.
EN29 Significant environmental impact of transporting products	Not applicable. Capital Power does not transport products.
EN30 Total environmental protection expenditures	Capital Power reports on specific projects. However, no total dollar value is reported for research and development activities as this data is not aggregated within the company.

Exclusions

GRI indicator and descriptor	Reason for not reporting
LA7 Rates of employee absenteeism	With information system upgrades completed in 2013, we no longer track employee absenteeism.
LA10 Average hours of training per year per employee	Capital Power does not currently collect this data.
LA12 Percentage of employees receiving regular performance and career development reviews	Managers are responsible for providing regular (at least annual) performance reviews for their employees; however, Capital Power's systems do not currently collect aggregated data on the completion of reviews.
LA15 Return to work and retention rates after parental leave by gender	Capital Power does not currently collect this data.
PR1 Life cycle stages in which health and safety impacts of products and services are assessed for improvement	As a power producer, Capital Power does not have products and services.
SO9 Operations with significant potential or actual negative impacts on local communities	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's operations.
SO10 Prevention and mitigation measures for negative impacts on local communities	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's operations.

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