

# DELIVERING ON A BRIGHTER FUTURE

CORPORATE RESPONSIBILITY &  
SUSTAINABILITY REPORT



## ABOUT THIS REPORT

SaskPower's 2018-19 Corporate Responsibility & Sustainability Report provides an overview of our company's strategy in creating long-term value for our customers and communities. It also outlines our 2018-19 environmental, social and economic performance while discussing the challenges ahead in 2019-20 and beyond. The report aligns SaskPower with the principles of the Canadian Electricity Association's Sustainable Electricity Program, to which we make a reporting submission annually.

### Cover/inside cover

At the time it was commissioned in 2006, SaskPower's 150-megawatt Centennial Wind Power Facility was the largest operating wind generation installation in Canada. Over the next decade, SaskPower plans to add significant renewable wind resources to meet its target of a 40% reduction of carbon dioxide emissions from 2005 levels by 2030.





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## OUR VISION

Powering Saskatchewan to a cleaner energy future through innovation, performance and service.

## OUR MISSION

Ensuring reliable, sustainable and cost-effective power for our customers and the communities we serve.

## OUR VALUES

Safety, openness, collaboration and accountability.

## OUR CORPORATE PILLARS

- Customer Experience & Stakeholder Relations
- Workforce Excellence
- Efficiency, Quality & Cost Management
- Sustainable Infrastructure & Reliability

## CONTACT US

If you would like further information about this report or SaskPower, please email [sustainability@saskpower.com](mailto:sustainability@saskpower.com).

# OUR COMPANY

## CORPORATE PROFILE

Established in 1929, SaskPower is Saskatchewan's leading energy supplier. We are defined by our commitment to support the province's economic growth, protect its natural resources and enhance the quality of life of its people. Our corporate mission: ensuring reliable, sustainable and cost-effective power for our customers and the communities we serve.

SaskPower's team is made up of over 3,100 permanent full-time employees. We manage over \$11.8 billion in

generation, transmission, distribution and other assets. Our company operates six natural gas-fired stations, three coal-fired power stations, seven hydroelectric stations, and two wind facilities. Combined, they generate 3,791 megawatts (MW) of electricity.

SaskPower also buys power from various independent power producers (IPPs), including the North Battleford Generating Station, Meridian Cogeneration Station, Spy Hill Generating Station, Red Lily Wind Energy Facility, SunBridge Wind Power Facility, Western Lily Wind Energy Facility, Morse Wind Energy Facility and NRGreen Kerrobert, Loreburn,

Estlin and Alameda Heat Recovery Facilities. Our total available generation capacity is 4,531 MW. We have interties at the Manitoba, Alberta and North Dakota borders for electricity import and export.

We are responsible for serving nearly 538,000 customer accounts within Saskatchewan's geographic area of approximately 652,000 square kilometres. We maintain nearly 157,000 kilometres of power lines, 56 high voltage switching stations and 197 distribution substations. About three customer accounts are supplied per circuit kilometre.

## AT A GLANCE



**537,714**  
Customer accounts

**652,000 km<sup>2</sup>**  
Service area

**3**  
Customer accounts per circuit km  
of transmission and distribution lines

**14,332 circuit kilometres**  
Transmission lines

**142,415 circuit kilometres**  
Distribution lines

**56**  
High voltage switching stations

**4,531 megawatts**  
Available generating capacity

**8,110 kilowatt hours**  
Average annual use per  
residential customer

**3,723 megawatts**  
System peak load

**\$833 million**  
Capital expenditures

**\$11.8 billion**  
Assets

**3,167**  
Permanent full-time employees

UNLESS OTHERWISE NOTED, THIS REPORT COVERS THE FISCAL YEAR REPORTING PERIOD OF APRIL 1, 2018, THROUGH MARCH 31, 2019.

# 2018-19 HIGHLIGHTS

## ⚡ CONTINUING OUR COMMITMENT TO A LOWER CARBON FUTURE

**NAMED** Potentia Renewables Inc. as the successful proponent for the province's latest utility scale wind power project — the 200-megawatt (MW) Golden South Wind Energy Facility located near Assiniboia.

**ADDED** the new 20-MW Western Lily Wind Energy Facility, located near Grenfell.

**ANNOUNCED** Saturn Power Inc. as the successful proponent for Saskatchewan's first utility-scale solar project, a 10-MW installation located southeast of Swift Current.

**SIGNED** a new term sheet with Manitoba Hydro that lays the groundwork for purchasing an additional 215 MW of reliable renewable hydroelectricity.

**SIGNED** a First Nations Opportunity Agreement with the First Nations Power Authority to source 20 MW of flare gas power generation projects led by Indigenous communities and businesses.

**CONTINUED** work on a \$300-million life extension project at E.B. Campbell Hydroelectric Station near Nipawin, ensuring that this source of renewable generation will be available for another 50 years.

## ⚡ VALUING OUR EMPLOYEES, CUSTOMERS AND COMMUNITIES

**CONTRIBUTED** almost \$1.8 billion to the provincial economy.

**LAUNCHED** expanded options for customers to develop renewable projects under the Power Generation Partner Program.

**REDUCED** customer electricity consumption and peak demand by 54.7 gigawatt hours and 11.4 MW respectively through energy conservation and efficiency programming.

**RECEIVED** the 2018 Canadian Electricity Association President's Award of Excellence for Employee Safety in Distribution.

**SELECTED** as one of Canada's Best Employers, one of Canada's Best Diversity Employers, one of Canada's Top Employers for Young People, and one of Saskatchewan's Top Employers.

**SIGNED** a three-year partnership with the University of Saskatchewan to support first-year First Nations, Inuit, and Métis students wanting to enter diverse science, technology, engineering, and math degree pathways.

**INVESTED** over \$1.7 million in educational and community programming throughout Saskatchewan.

## ⚡ PRIORITIZING FINANCIAL AND OPERATIONAL RESPONSIBILITY

**REACHED** \$155 million in operating, maintenance and administration budget reductions since 2015 through continuous improvement and strategic cost reduction.

**INVESTED** \$287 million in Saskatchewan's generation, transmission and distribution system to renew, refurbish or replace existing infrastructure.

**INVESTED** \$443 million on new generation, transmission and distribution facilities to accommodate growth in demand and customer connections.

**ACHIEVED** a 7.5% Indigenous procurement rate — worth approximately \$49 million — through services such as civil construction, vegetation management, wood pole remediation and environmental monitoring.



# A MESSAGE TO OUR STAKEHOLDERS

One of the biggest changes of the 21st century is the growing collective awareness of society's impact on the environment and the sense of duty to minimize that impact. At SaskPower, our drive to dramatically reduce carbon emissions over a relatively short period of time is radically shifting our business at its very core. Yet, our response to climate change represents only one part of the sustainability story we have to tell.

This year marks the re-launch of SaskPower's Corporate Responsibility & Sustainability Report, the first since 2012. We elected to pause our annual public reporting and turn our focus inward to develop a game plan on how to advance our sustainability goals and measure progress. Since then, the very concept of sustainability has undergone a profound transformation within the electricity sector — evolving from an emerging concept to the point where it is now considered an integral and essential foundation for all our work.

**Because of the time we took to define our corporate responsibility and sustainability priorities, SaskPower is much better prepared to pursue its business activities in order to meet the needs of the present — but without sacrificing the environmental, social and economic foundation that is a key to our future. The outcome of our internal efforts is a comprehensive SaskPower Corporate Responsibility and Sustainability Policy, as well as updated terms of reference for our Board of Directors that reflect a corporate-wide commitment to sustainability work.**

We have also completed wide-ranging materiality work to understand what's important to our customers and stakeholders, undertaken a corporate responsibility gap analysis, and assigned corporate responsibility and sustainability accountability to a specific committee of our Board. Meanwhile, we targeted the achievement of a Sustainable Electricity Company™ designation from the Canadian Electricity Association.

Protecting our province's resources while continuing to provide a safe and reliable source of power to our customers is at the heart of our commitment to reduce carbon dioxide (CO<sub>2</sub>) emissions by 40% from 2005 levels by 2030. At the same time, a rapidly changing regulatory environment will require us to eliminate conventional coal generation by 2030. As well, at the same deadline a carbon tax will be paid on all carbon emissions from natural gas-fired generation facilities commissioned after 2020 — significantly hampering the economics of using this generation source to back up intermittent renewable power. This is in addition to the carbon tax threshold of 370 tonnes of CO<sub>2</sub>/gigawatt hour applied to legacy natural gas-fired facilities.

Responding to this unprecedented change in how we generate power is complicated by the fact that the demand for electricity continues to grow among our customers. We are positioning our generation fleet to be able to handle significant investment in renewable generation options like wind and solar power to fill this growing capacity requirement.

At the same time, Demand Side Management (DSM) — electricity conservation and efficiency — will continue to assist in softening the growing demand for electricity. We expect our DSM programs will evolve to become more targeted to ensure they deliver increased value to SaskPower and customers alike. The same approach will be applied to the work we are doing with customers as they seek more ways to participate in Saskatchewan's electricity system, especially through self generation.

Of course, sustainability is about much more than addressing the environmental issues that come with generating, transmitting and distributing electricity. It is also about involving our customers in the conversation that shapes what the energy future will look like in Saskatchewan. Over the last year, SaskPower's engagement efforts have



evolved as we broaden our work with customers and stakeholders and see the inherent value in even more dynamic partnerships.

Further, we are excited by our efforts to enhance engagement with our province’s Indigenous communities. We remain committed to developing a strategy and framework that will address gaps in relationships and services. Ultimately, our goal is to build a strong foundation for moving forward with enhanced approaches that alleviate frustrations and foster innovation.

As we move ahead in this uncertain energy landscape, within SaskPower it is critical that we have the right people in place. This Corporate Responsibility & Sustainability Report provides an overview of the effort we are investing in building a workforce for the future — one that will be diverse, inclusive, engaged, and agile. Our support for employees extends beyond the workplace to include the investments we make in their home communities through our Community Partnerships and Investment Policy.

One of the recognized pillars of any sustainability framework is strong corporate financial management. Through our corporate-wide Continuous Improvement and Strategic Cost Reduction Initiative, our staff continues to improve processes and bolster the financial foundation of our company. This important work contributed to our decision to not request a rate increase for the second consecutive fiscal year.

We are proud of what we’ve accomplished since our last public Sustainability Report, however we recognize that monumental challenges remain. Ensuring alignment with internationally recognized responsibility

guidelines, we are working to continuously improve our corporate responsibility and sustainability performance throughout SaskPower.

New and improved technologies, along with increased regulatory requirements and changing customer expectations, mean we will have to sharpen our focus so that we can continue to deliver on our commitment to serve the people and businesses of Saskatchewan.

Finally, we would like to thank our employees, contractors and partners for their dedication and hard work as we move forward on this journey to becoming a more resilient and responsible organization.

Your feedback is important to us. If you have any questions or comments on this report, please send them to [sustainability@saskpower.com](mailto:sustainability@saskpower.com).



Chief Darcy Bear  
Chair, Board of Directors



Mike Marsh  
President and CEO

# OUR APPROACH TO DELIVERING ON A BRIGHTER FUTURE

MEETING THE CORPORATE RESPONSIBILITY AND SUSTAINABILITY CHALLENGE MEANS USING RESOURCES WISELY, SUPPORTING THE WORK AND GROWTH OF OUR EMPLOYEES, MAINTAINING THE FINANCIAL HEALTH OF OUR BUSINESS, AND PURSUING A CLEANER, SECURE AND AFFORDABLE ENERGY SUPPLY.

SUCCESS IS DEPENDENT ON HONOURING OUR RELATIONSHIPS WITH STAKEHOLDERS AND INDIGENOUS COMMUNITIES THROUGH OPENNESS, TRANSPARENCY AND DIALOGUE. IT IS ALSO RELIANT ON SUPPORTING THE COMMUNITIES WE SERVE WHILE ASSISTING OUR CUSTOMERS WITH THE SAFE AND EFFICIENT USE OF ELECTRICITY.



**At SaskPower, we recognize that responsible behaviour is not only good business, but an expectation of our customers and stakeholders. Our internal Sustainability Office is tasked with leading our efforts in integrating corporate responsibility and sustainability throughout the company's operations.**

The work of this office is based on the International Organization for Standardization (ISO) 26000 guidance on social responsibility. ISO 26000 offers a framework on how businesses and organizations can operate in a socially responsible way.

The guidance is organized into seven core subjects and associated core issues, including: organizational governance, human rights, labour practices, the environment, fair operating practices, consumer issues, and community involvement and development. We have also taken steps to further understand what parts of corporate

responsibility and sustainability are most important to our stakeholders through a process of significance testing.

By gathering and analyzing stakeholder engagement results — incorporating sources as diverse as focus groups, town hall meetings, project engagements, customer satisfaction surveys, and employee engagement surveys — we were able to develop a list of the most significant issues our stakeholders told us we need to address and track.

The final step of our significance testing work included dedicated sessions with the

SaskPower Executive leadership team to gather and incorporate input regarding the importance of issues, and how they relate to our business operations now and in the future.

The content of this Corporate Responsibility & Sustainability Report reflects SaskPower's performance for the 2018-19 fiscal year and includes all entities reported on in SaskPower's consolidated financial statements. This reporting has been guided not only by the results of our stakeholder and leadership significance testing, but also by the Global Reporting Initiative (GRI) Standards.

**MATERIALITY: SIGNIFICANT ISO 26000 ISSUES IDENTIFIED BY STAKEHOLDERS AND SASKPOWER LEADERSHIP**

Customers	Protection of the environment, biodiversity and restoration of natural habitats	Climate change mitigation and adaptation	Consumer data protection and privacy
Landowners	Discrimination and vulnerable groups	Fair competition	Access to essential services
Indigenous communities	Economic, social and cultural rights	Promoting social responsibility in the value chain	Education and awareness
Business associations	Employment and employment relationships	Respect for property rights	Community involvement
Community organizations	Social dialogue	Fair marketing, factual and unbiased information and fair contractual practices	Education and culture
Public interest groups	Health and safety at work	Protecting consumers' health and safety	Employment creation and skills development
Employees/Executive/Board Members	Human development and training in the workplace	Sustainable consumption	Technology development and access
Other utilities	Prevention of pollution	Consumer service, support, and complaint and dispute resolution	Wealth and income creation
Non-governmental organizations (NGOs)	Sustainable resource use		Social investment
Academia			
Suppliers			
Governments (local, provincial and federal)			

\* STAKEHOLDERS AND SIGNIFICANT ISSUES NOT PRESENTED IN ANY RANKED ORDER.

## GOVERNANCE

The Safety, Environment & Corporate Responsibility (SE&CR) Committee of the SaskPower Board of Directors is responsible for providing oversight of Corporate Responsibility & Sustainability (CR&S) within the company. The SE&CR Committee is charged with ensuring that SaskPower proactively addresses safety, health and environmental issues, is in compliance with regulatory and statutory requirements, and strengthens its performance in the area of corporate responsibility and sustainability.

Some of the committee's specific responsibilities include: reviewing the annual CR&S Report; reviewing and recommending to the Board amendments to the CR&S Policy; reviewing, reporting and monitoring on CR&S issues and strategies; and holding management accountable for overall CR&S performance. The SE&CR Committee Terms of Reference can be found online at [saskpower.com](http://saskpower.com).

The SE&CR Committee reports to the SaskPower Board of Directors, which consists of 12 independent Directors. The Board is responsible for the general stewardship of our company and is accountable for

setting direction, monitoring and evaluating achievement, as well as identifying any necessary corrective action for SaskPower.

Crown Investments Corporation of Saskatchewan (CIC) appoints members to the SaskPower Board of Directors. CIC acts as the holding company for SaskPower and has the broad authority to set the direction of SaskPower. As a provincial Crown corporation, SaskPower is governed by *The Power Corporation Act* and is also subject to the provisions of *The Crown Corporations Act, 1993*.

Although SaskPower is not required to comply with the Canadian Securities Administrators (CSA) Governance Guidelines, SaskPower uses them to benchmark our governance practices. Details on these guidelines and how our company's practices are substantially consistent with CSA standards are found in a governance performance scorecard that is included in our corporate Annual Report, found online at [saskpower.com](http://saskpower.com).

Internally, SaskPower's employees and contractors are governed by a series of policies, including our Code of Conduct and CR&S Policy. To ensure responsible

performance, we use a variety of checks and balances that include: reporting and complaint mechanisms, internal and external audits, and external agencies.

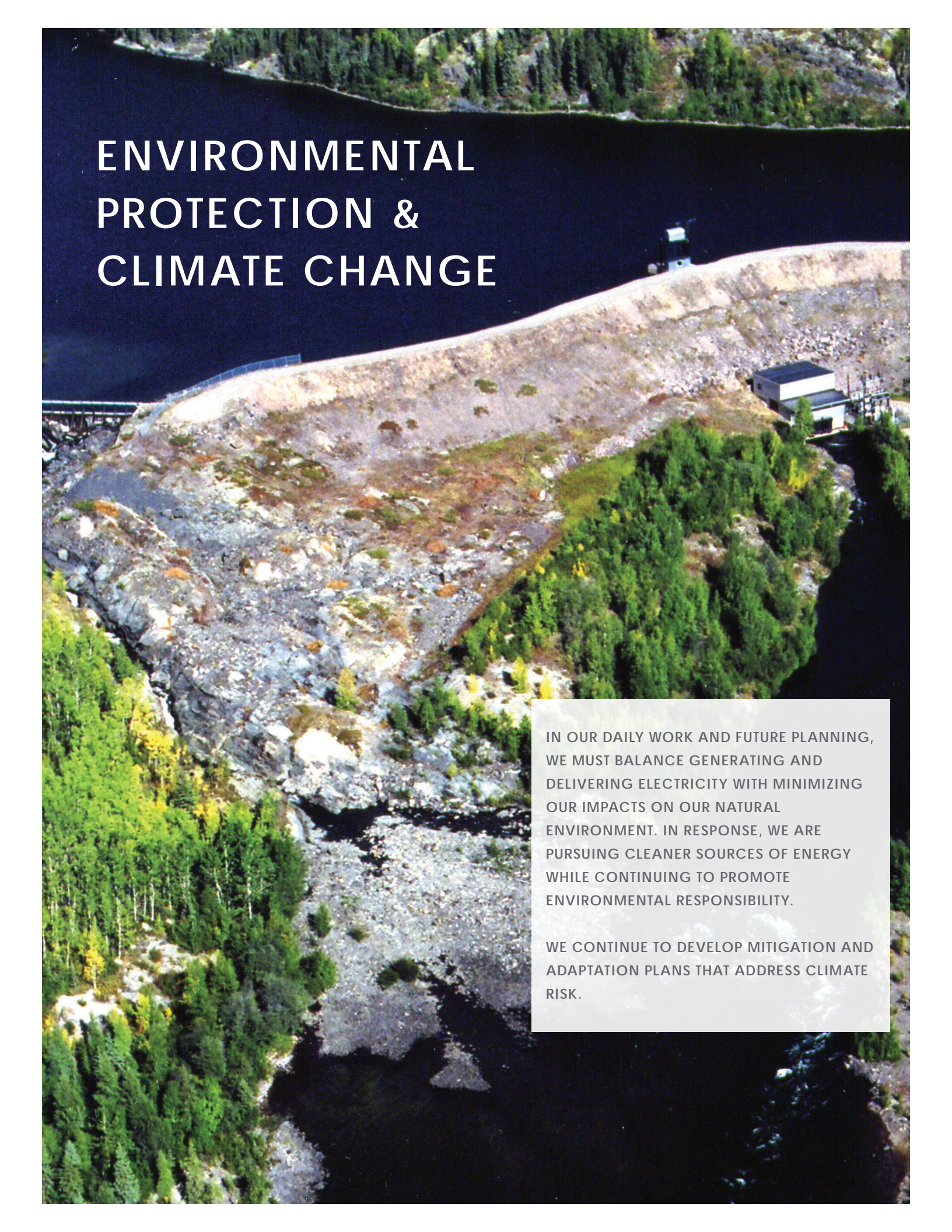
Each level of governance provides additional assurance and has its own part to play in setting and carrying out SaskPower's strategic direction and ensuring responsible corporate performance.

## EMPLOYEE SUSTAINABILITY NETWORK

In 2018, SaskPower's Employee Sustainability Network was established as a way for employees from across the company to further sustainability performance through employee-led initiatives.

In its first year, the network hosted a variety of presentations on topics such as Duty to Consult, Indigenous relations, energy efficiency and conservation programs, and composting. The network also participated in a volunteer day at the Habitat for Humanity ReStore in Regina as well as supported initiatives of other employee networks such as a winter clothing drive, and the collection of smart phones for the Canadian National Institute for the Blind.



An aerial photograph showing a large dam structure on the left, a reservoir in the upper left, and a rocky, sparsely vegetated embankment on the right. A small building is visible on the embankment. The foreground and lower right are dominated by dense green forest.

# ENVIRONMENTAL PROTECTION & CLIMATE CHANGE

IN OUR DAILY WORK AND FUTURE PLANNING, WE MUST BALANCE GENERATING AND DELIVERING ELECTRICITY WITH MINIMIZING OUR IMPACTS ON OUR NATURAL ENVIRONMENT. IN RESPONSE, WE ARE PURSUING CLEANER SOURCES OF ENERGY WHILE CONTINUING TO PROMOTE ENVIRONMENTAL RESPONSIBILITY.

WE CONTINUE TO DEVELOP MITIGATION AND ADAPTATION PLANS THAT ADDRESS CLIMATE RISK.

SaskPower's Environmental Management System (EMS) conforms with the ISO 14001:2015 Standard, which serves as the foundation of our commitment to strong environmental performance and transparency. The EMS supports our employees and contractors in conducting operations in an environmentally sustainable manner while remaining committed to continuous environmental improvement and transparent reporting. SaskPower employees and contractors are required to participate in a comprehensive environmental awareness training program to ensure they understand their roles and responsibilities within the EMS.

To align with the ISO 14001:2015 Standard, SaskPower made several changes that allow us to better identify areas of improvement and track progress by setting specific objectives and targets based on environmental, regulatory, technological, and financial considerations. Our EMS database has been upgraded and integrated with safety. It is now visible to all SaskPower employees and structured to make it easier for the entry of information into the system.

#### **CLIMATE CHANGE RISK AND ADAPTATION**

SaskPower is continuing the analysis of potential mitigation and adaptation strategies that will address future climate risks. While climate change has been identified as one of SaskPower's biggest sustainability challenges, we acknowledge that the full extent of its potential impacts on our operations — as well as our customers — is not completely understood.

Nevertheless, climate change is already causing dynamic influences on the seasonal and annual patterns of precipitation and temperature and on the frequency, intensity, and duration of extreme weather events.

The US National Oceanic and Atmospheric Administration and the Insurance Bureau of Canada both report an increase in billion-dollar weather events and catastrophic insured losses in the last 20 years.

Locally, these types of events potentially threaten SaskPower's ability to deliver reliable, sustainable and cost-effective power to our customers. To fulfill our mandate while also preparing for an uncertain future, SaskPower must develop plans that not only assume a continually changing operating environment, but are also rooted in a management approach that is based on adaptation.

The Canadian Electricity Association (CEA) is working with its members — including SaskPower — to support the thorough assessment and integration of climate risks in business decision-making. By leveraging best practices being shared among CEA members, SaskPower has committed to have a Climate Change Adaptation Plan in place in 2020. This plan will address the removal of barriers to risk awareness; opportunities for improving the resilience of transmission and distribution systems to extreme weather

events; and the development of assumptions underpinning power system planning and demand forecasting.

In an effort to identify potential gaps in responding to variations in weather and climate change, SaskPower is supporting a University of Regina Natural Sciences and Engineering Research Council study on the risks to future industrial water supplies from the North Saskatchewan River. Few reservoirs exist to manage water supply on this prairie-wide system and this vulnerability may impact SaskPower's main hydroelectric assets.

#### **MANAGING EMISSIONS REGULATIONS**

From a corporate sustainability perspective, transitioning in a relatively short period of time from an electricity generation system that has traditionally relied heavily on fossil fuels — coal and natural gas — is the most pressing issue facing SaskPower.

As a result of federal regulations, the phase-out of our company's conventional coal-fired generation will have to be completed by 2030. With the elimination of SaskPower's longest-serving primary baseload source



THE BOUNDARY DAM POWER STATION UNIT #3 CARBON CAPTURE FACILITY CAPTURED 625,996 TONNES OF CO<sub>2</sub> IN 2018-19.

of electricity, we are considering a variety of options, including: a combination of renewables and baseload capable natural gas-fired generation; electricity imports from neighbouring jurisdictions; and/or fitting carbon capture and storage (CCS) technology onto our coal-fired generation units.

SaskPower has been taking proactive steps to reduce our generating system emissions. We continue to implement our vision of a cleaner energy future through a renewed supply plan that will reduce carbon dioxide (CO<sub>2</sub>) emissions by 40% from 2005 levels by 2030 — and will actually exceed the current federal emission reduction target of 30% in the process.

In December 2017, the Government of Saskatchewan introduced *Prairie Resilience*, the province’s made-in-Saskatchewan climate change strategy. SaskPower’s plan to reduce the carbon footprint of electricity generation is a key component of the *Prairie Resilience* strategy.

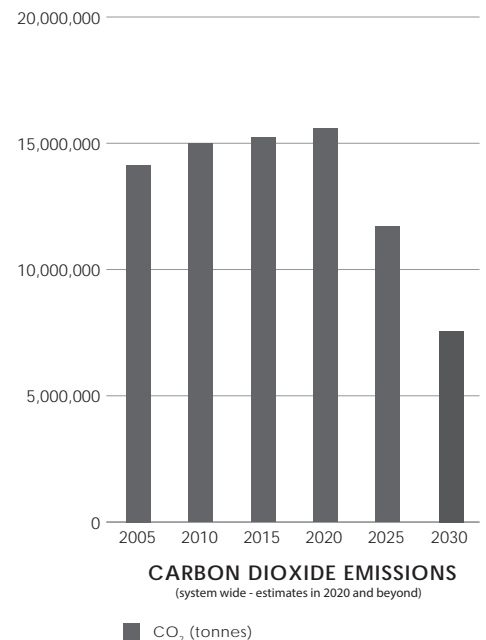
In October 2018, Environment and Climate Change Canada (ECCC) announced that despite the ongoing execution of the *Prairie Resilience* strategy, the federal carbon pricing system will be implemented in Saskatchewan. The Federal Output-Based Pricing System (OBPS) was applied to SaskPower’s electricity generation on January 1, 2019. SaskPower began recovering the expense associated with the federal OBPS

by collecting an electricity rate rider from customers effective April 1, 2019. This was based on our understanding of the draft regulations at the time and appears as an additional charge on customers’ bills, separate from basic monthly electricity rates. It is estimated the federal OBPS-related expense for SaskPower will be approximately \$55 million for 2019, which is equivalent to a 2.8% system average rate increase.

SaskPower will see its emissions profile rise slightly until 2020, as we add natural gas plants to support the addition of new renewable sources of generation. After 2020, our emissions profile is projected to drop dramatically as we retire conventional coal facilities and continue our efforts to replace that lost generation with low- or non-emitting sources that may include wind, solar, hydro, imports, coal with carbon capture and storage, and efficient natural gas generation.

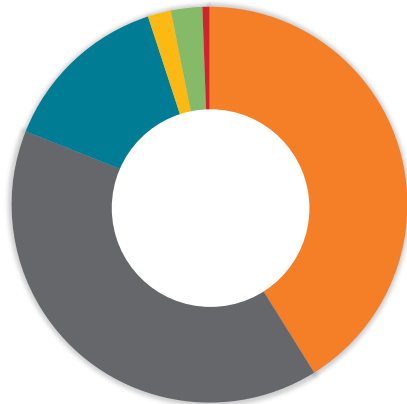
In June 2019, ECCC released final standards for carbon emissions from industrial sources in the OBPS Regulations, which apply to SaskPower. These regulations will have a significant impact on SaskPower and its customers.

The emission rate threshold for natural gas-fired electricity remained unchanged for existing facilities. However, a declining threshold was introduced for natural gas units commissioned as of January 1, 2021.



This would result in a carbon tax being paid on all emissions by 2030 for all natural gas facilities that SaskPower introduces to Saskatchewan's electricity system to enable the retirement of higher emitting conventional coal facilities and back up intermittent wind and solar generation.

Natural gas facilities are a possible transitional step to future supply options that could include battery storage, small modular reactors (SMRs), coal with CCS, or greater partnerships with neighbouring utilities with excess renewable electricity, such as Manitoba Hydro. SaskPower is also considering the improvement of interconnection capacity with neighbouring markets. Participation in a regional power pool could provide access to load balancing without making a long-term commitment to natural gas generation.



2018-19 GROSS ELECTRICITY SUPPLIED  
25,777 GWH

- GAS 41%
- COAL 40%
- HYDRO 14%
- IMPORTS 2%
- WIND 2%
- OTHER 1%

### RESPONDING TO CARBON-RELATED GENERATION CHALLENGES

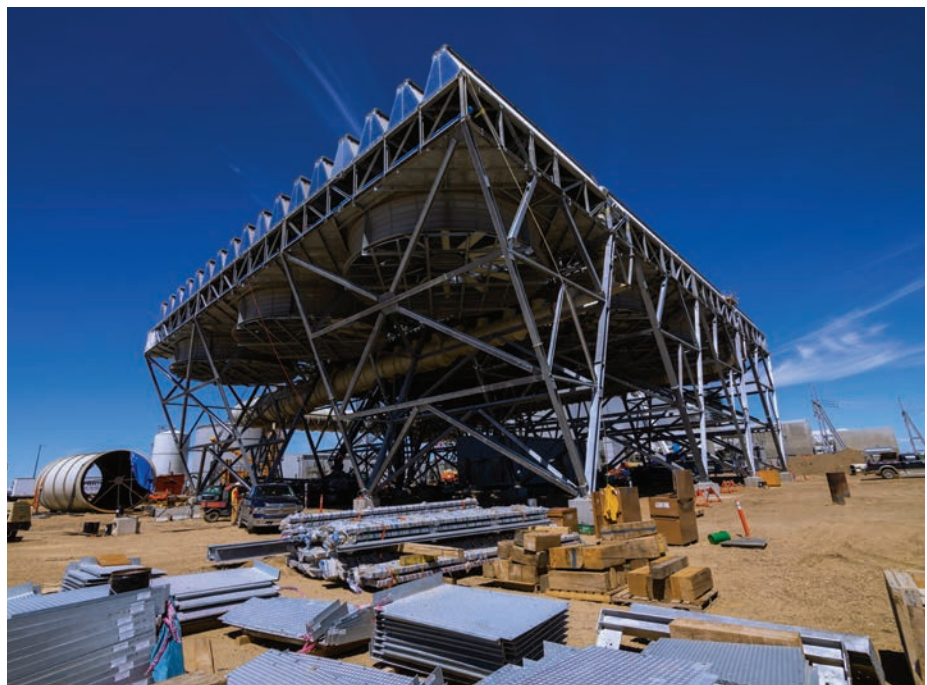
While we respond to the need to reduce emissions, we must also plan for growth: SaskPower expects an average annual increase of 1.1% in Saskatchewan electricity sales over the next five years. Our plan to address this rising demand for power in a sustainable manner incorporates both renewable and low-emission generation options.

In 2018-19, natural gas-fired generation represented 41% of electricity produced by SaskPower — surpassing coal for the first time. The presence of a strong natural gas-fired generation fleet offers two benefits: it provides a potential baseload replacement for conventional coal generation while also offering system operation flexibility in support of additional renewable generation.

Construction is being completed on our new 350-MW natural gas-fired Chinook Power Station, which will enter service in 2019-20. As we set the stage to add even more intermittent renewable generation to our system, SaskPower is considering the addition of other natural gas-fired stations.

Utility-scale solar power took an important step forward this year. SaskPower announced that Saturn Power Inc. was chosen as the successful proponent to build the 10-MW Highfield Solar Project southeast of Swift Current.

Hydroelectricity is another important source of reliable renewable power for SaskPower. During 2018-19, we signed a new term sheet with Manitoba Hydro that could result in 190 MW of capacity from Manitoba Hydro by 2022, with an option to purchase an additional 25 MW. The agreement would last for up to 30 years. SaskPower already has two existing power purchase agreements with Manitoba Hydro totaling 125 MW.



THE NEW 350-MW NATURAL GAS-FIRED CHINOOK POWER STATION WILL ACT AS AN IMPORTANT BASELOAD SOURCE AND BACK UP INTERMITTENT WIND AND SOLAR RENEWABLE GENERATION.

At the same time, SaskPower is in the process of a \$300-million life extension project for our 289-MW E.B. Campbell Hydroelectric Station. The project is expected to finish by 2025. Meanwhile, a \$45-million concrete rehabilitation project continues at the Island Falls Hydroelectric Station, with work on the 111-MW facility scheduled to be completed by 2021.

In 2014, Boundary Dam Power Station became the first power station in the world to successfully use commercial scale CCS technology. Since start-up, the facility has captured approximately 2,596,042 tonnes of CO<sub>2</sub>, the equivalent of taking nearly 650,000 cars off Saskatchewan roads.

SaskPower and the International CCS Knowledge Centre continue to evaluate carbon capture technologies and opportunities.

### OTHER AIR EMISSIONS

SaskPower fossil fuel generation operations also emit mercury, sulphur dioxide, nitrogen oxides, and particulates. To engage areas of the province where we operate multiple coal-fired power stations, SaskPower continues to serve on the Board of Directors of the Southeast Saskatchewan Airshed Association (SESAA).

The SESAA is a collaborative group of industry, government, non-governmental organizations and private citizens. Its mandate is to monitor ambient air quality in the southeast region of the province — including sulphur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), and ozone.

Air quality in the region remains good with monitoring showing that SO<sub>2</sub>, NO<sub>2</sub>, and ozone are well within existing Saskatchewan Ambient Air Quality Standards. For further information on the activities of the SESAA, please visit [sesaa.ca](http://sesaa.ca).

### SASKPOWER SHAND GREENHOUSE

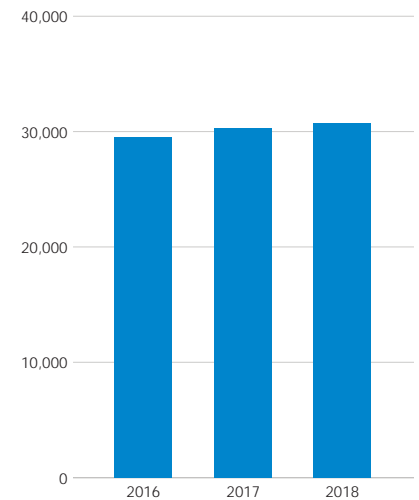
The impact of SaskPower’s emissions is partially offset through the operations of the SaskPower Shand Greenhouse. Since 1991, the greenhouse has used the waste heat from the nearby Shand Power Station to grow millions of tree, shrub and native plant seedlings that are used in community-based land reclamation and other environmental planting projects.

Last year, we received more than 1,500 applications for the 473,000 seedlings that were available. To date, the greenhouse has distributed almost 12 million seedlings.

At the same time, staff at the greenhouse engage with elementary school students and other community groups to raise awareness about climate change and the impacts associated with using electricity.

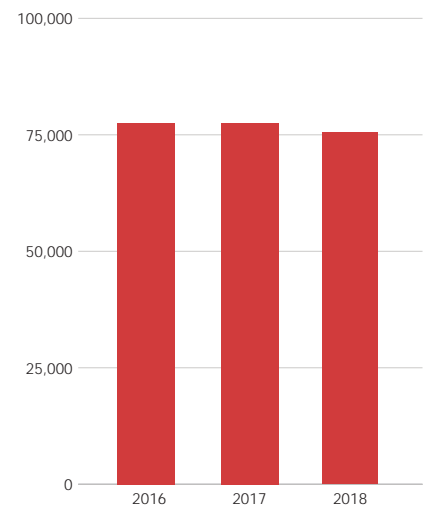
### ENVIRONMENTAL SCREENINGS AND BENEFICIAL MANAGEMENT PRACTICES

SaskPower uses an Environmental Screening System (ESS) during power line route planning and design to identify potential environmental and heritage issues of concern for proposed projects. The ESS is an internal geographic information system (GIS) database that includes current baseline environmental and archaeological data compiled from various sources.



**NITROGEN OXIDE EMISSIONS**

■ NO<sub>x</sub> (tonnes)



**SULPHUR DIOXIDE EMISSIONS**

■ SO<sub>2</sub> (tonnes)



THE ISLAND FALLS HYDROELECTRIC STATION CONCRETE REHABILITATION PROJECT WILL EXTEND THE LIFE OF THIS 90-YEAR OLD SOURCE OF RENEWABLE GENERATION BY 50 YEARS.



SASKPOWER'S ENVIRONMENTAL BENEFICIAL MANAGEMENT PRACTICES MANUAL IDENTIFIES REQUIREMENTS FOR PROJECTS LIKE THE NEW CHAPLIN TRANSMISSION LINE.

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## 78

environmental assessment and remediation projects undertaken

The ESS database includes information from known, published and digitally compiled lists of environmental occurrences (Conservation Data Centre-tracked plants and animals); land with specific legislative status; areas with other status or ranking; and presently undisturbed habitat. The information and data are updated regularly and acquired from a variety of government, non-government agency, private sector and academic sources. Each new construction or planned maintenance transmission, distribution or fibre project is screened using the ESS.

SaskPower's Environmental Beneficial Management Practices Manual identifies environmental planning requirements. Additionally, it provides a set of beneficial management practices for SaskPower employees and their contractors to use during transmission, distribution and communication (fibre optic) project planning, construction and maintenance. The beneficial management practices are applicable to both linear projects and new or expanded facilities.

The beneficial management practices have been designed to address three project phases: pre-construction and planning, construction, and maintenance. Proper planning and mitigation of potential effects throughout these three phases of a project reduce the risk of potential environmental effects and improve SaskPower's ability to meet stakeholder expectations and project operational objectives. Additionally, the beneficial management practices have been designed to address existing federal and provincial regulatory requirements.

### SITE ASSESSMENTS AND REMEDIATIONS

SaskPower conducts site assessment and remediation on properties prior to sale, purchase or lease agreements, or in response to the identification of potential contamination resulting from our operations. In 2018, 78 site assessment/remediation projects were carried out. This number of site assessment/remediation projects has been consistent over the last four years.



One of our major contaminated site portfolios involves our former northern diesel sites. Until communities were connected to the provincial transmission system in the 1980s, SaskPower operated diesel generating stations in northern Saskatchewan. In 2008, an environmental review determined that more work was required to verify if there were any possible adverse effects at 32 of these sites.

Since then, ongoing assessment and remediation work has been conducted to address these gaps and manage environmental concerns. It is anticipated that all former northern diesel generating stations will have assessments completed by 2026.

### **POLYCHLORINATED BIPHENYLS (PCBs)**

PCBs are a toxic substance found in the oil used in many of SaskPower's pole top and ground transformers. PCBs were used in oil until the 1980s to help cool equipment. Due to the impacts of PCBs — their environmental persistence and ability to bioaccumulate in the food chain — the federal government took action to significantly reduce PCBs in Canada.

SaskPower continues to implement its PCB Action Plan to manage the risks associated with in-service PCB-contaminated equipment. Our company has removed nearly 1.5 million litres of PCB-contaminated oil from our large equipment and replaced it with PCB-free oil. Nearly 48,000 pieces of equipment initially identified as potentially containing PCBs have now been confirmed as PCB-free, removed from service, or had their PCB-contaminated oil removed.

The PCB Action Plan exceeds regulatory requirements and is expected to be complete two years earlier than the legislated deadline of December 31, 2025.

### **SPILLS REDUCTION**

During the 2018-19 fiscal year, SaskPower reported 17 regulated releases that occurred on facility, job and infrastructure sites. Regulated releases are required to be reported under federal or provincial law or as a condition of a permit.

The majority of the regulated releases were due to equipment failure or caused by external parties. There were no long-term environmental impacts as a result of these releases and corrective actions have been taken in response to each incident.

### **VEGETATION MANAGEMENT**

When tree branches fall across a line during a storm, it can cause damage and interrupt electrical service. SaskPower manages vegetation along all power line rights-of-way in order to ensure safe and reliable operation.

SaskPower uses integrated vegetation management practices — including mechanical clearing and trimming and the targeted use of herbicides — to transition the right-of-way to a low-growing shrub and native plant community. Company policies, beneficial management practices, and provincial and federal regulatory requirements are followed when managing vegetation.

To better understand the effects of herbicides on the environment in Saskatchewan's northern regions, SaskPower collaborated with the University of Saskatchewan and the Lac La Ronge Indian Band on a research project. It evaluated the effects of triclopyr, a commonly used herbicide for tree control on utility rights-of-way.

The results indicate that triclopyr does not have an impact on ecosystem health when applied by low volume foliar or basal bark methods (other application types were not assessed). The project also evaluated methods to improve engagement with Indigenous communities and proposed a collaborative communication process for future projects on rights-of-way within traditional territory.

### **ENVIRONMENTAL PROTECTION PLANS (EPPs)**

By the end of 2019, Industrial Source (Air Quality) EPPs will have to be approved by the Saskatchewan Ministry of Environment. These EPPs will outline our strategy to handle air emissions at our higher emitting sources. This will include our coal and natural gas-fired generation facilities.

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**1.5M**  
litres of  
PCB-contaminated  
oil removed from  
SaskPower equipment  
since implementation  
of the PCB Action Plan

EPPs for Poplar River, Shand and Chinook Power Stations were approved by the Ministry in late 2018. A revised EPP for Boundary Dam Power Station was submitted in December 2018, and EPPs for Yellowhead, Ermine and Queen Elizabeth Power Stations were submitted in the spring of 2019.

EPPs for Landis Power Station and Meadow Lake Power Station are scheduled for submission in September 2019. EPPs for SaskPower's northern incinerators are no longer required as SaskPower plans to discontinue their use effective December 31, 2019.

As well, for the first time SaskPower developed an EPP for transmission and distribution activities occurring in or near water on private land. This will reduce the permitting requirement for low/medium risk maintenance activities. During 2018-19, we also completed an EPP covering our vegetation management work on Crown land.

#### **WATER POWER LICENSE RENEWAL**

SaskPower has renewed its Water Power License with the Saskatchewan Water Security Agency, which enables our company

to continue to operate the E.B. Campbell Hydroelectric Station near Nipawin. Meanwhile, the *Fisheries Act* authorization issued by Fisheries and Oceans Canada (DFO) to SaskPower related to the fish and fish habitat affected by the routine operation of the facility expired in June 2018.

SaskPower is working with DFO to renew this authorization in order to operate in accordance with regulatory requirements under the *Fisheries Act*. In the interim, our company continues to operate the facility as per the conditions defined under the previous authorization.

#### **DECOMMISSIONING AND RECLAMATION (D&R) GUIDELINES**

In April 2018, the Saskatchewan Ministry of Environment published guidelines that SaskPower must now follow when developing D&R plans for existing facilities, as well as environmental impact assessments for new developments.

D&R plans are required by January 2020 for Queen Elizabeth Power Station and SaskPower's three coal-fired power stations.

THE ENVIRONMENTAL PROTECTION PLAN FOR POPLAR RIVER POWER STATION WAS APPROVED IN 2018.



# MANAGING HYDROELECTRIC OPERATIONS AND LAKE STURGEON



E.B. CAMPBELL HYDROELECTRIC STATION

Hydroelectric power is an important, renewable form of energy that is an essential component of the SaskPower system. However, the operation of our hydroelectric facilities can affect fish and aquatic habitats — including lake sturgeon.

In Saskatchewan, lake sturgeon are found in the Churchill and Saskatchewan River systems. They are of great importance to Indigenous people as a traditional food source and a sacred animal of cultural and ceremonial significance.

Once plentiful across Canada, sturgeon suffered significant levels of overharvest due to their commercial value both as food and a source of caviar. This overharvest — combined with habitat changes resulting from development — have caused such significant declines in sturgeon populations within Saskatchewan and across the country that the Committee on the Status of Endangered Wildlife in Canada has recommended that lake sturgeon should be a federally listed and protected species.

SaskPower and other interested stakeholders formed the Saskatchewan River Sturgeon Management Board (SRSMB) in 1998. The SRSMB brings together Indigenous communities, industry and government to prevent the further decline of lake sturgeon on the Saskatchewan River between the E.B. Campbell Hydroelectric Station in Saskatchewan and the Grand Rapids Generating Station in Manitoba.

Work overseen by the SRSMB includes population monitoring, habitat assessment, harvest surveys, and public engagement

and outreach components. To date, we have seen stable and slightly increasing numbers of lake sturgeon in the area.

“Continuing with these types of partnerships — while also ensuring that we minimize our potential impacts on sturgeon — is very important,” says Marcy Bast, Resource Specialist, SaskPower. “I believe it’s a critical path in being successful with sturgeon population recovery.”



In addition to work being conducted by the SRSMB, SaskPower has funded lake sturgeon habitat and population studies on the Churchill River, as well as spawning studies at the Nipawin and E.B. Campbell Hydroelectric Stations that have shown successful results.

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# 263

species of birds found through SaskPower-supported Canadian Breeding Bird Atlas survey

## ZEBRA MUSSELS

SaskPower continues to monitor our operations for the presence of zebra mussels. While they have not yet appeared in Saskatchewan waterways, their arrival could quickly and completely plug the water flow systems that support the cooling functions at some of our generating stations.

We continue to participate in public awareness campaigns to help ensure boaters take proper cleaning and prevention efforts to keep zebra mussels out of provincial waters.

## HABITAT PRESERVATION

SaskPower provided important funding to a multi-year research project with the University of Regina that will evaluate habitat requirements for sharp-tailed grouse in Saskatchewan. During the year, we also supported several wildlife rehabilitation agencies across Saskatchewan.

Meanwhile, our employees worked on the development of a mitigation strategy that aims to reduce the potential spread of clubroot during our regular construction, maintenance, and operations activities.

A lack of data on migratory bat populations in Saskatchewan currently makes it difficult for our staff to predict high quality habitat or migratory pathways as they plan wind energy projects. To address this gap, SaskPower is supporting migratory bat research led by the University of Regina. With two seasons of bat surveys in southern Saskatchewan now complete, the results are revealing trends that may inform future wind energy site selection.


SaskPower is supporting the Bird Studies Canada Breeding Bird Atlas, a multi-year volunteer initiative to collect nesting bird data in all regions of the province. So far, 344 participants have logged 127,000 records and found 263 species in the province.



## TOWARD 2030 FUTURE FOCUS: ENVIRONMENTAL PROTECTION & CLIMATE CHANGE

- Analyze and define the future of coal-fired generation, natural gas-fired generation and carbon capture and storage in Saskatchewan in light of changing carbon regulations.
- Modernize the grid to accommodate climate change adaptation, automation, storage, electric vehicles, customer self generation and micro-grids.
- Continue to evaluate and implement new ways of meeting generation peak, baseload, and reliability requirements.
- Plan for increasing distributed energy resources and capitalize on emerging opportunities.

# CUSTOMER & COMMUNITY ENGAGEMENT



WE BELIEVE THAT A STRONG RELATIONSHIP WITH THOSE WHO HAVE A SHARED INTEREST IN SASKPOWER IS FUNDAMENTAL TO OUR COMPANY'S SUCCESS.

WE PURSUE A CONNECTION WITH CUSTOMERS, INDIGENOUS COMMUNITIES AND ALL STAKEHOLDERS THAT IS TRANSPARENT AND ACCOUNTABLE WHILE SUPPORTING THE DEVELOPMENT OF PARTNERSHIPS.

WE CHAMPION SAFETY AS WELL AS ENERGY EFFICIENCY AND CONSERVATION INITIATIVES WHILE SUPPORTING THE COMMUNITIES WE SERVE.

When it comes to our customers and stakeholders, being accountable and accessible is a fundamental pillar of corporate responsibility and sustainability. We place a premium on ensuring customers and stakeholders have a high degree of confidence in the decisions we make around infrastructure, service offerings, and rates.

We monitor how our customers perceive us – and course correct when needed – through regular surveys on our corporate reputation. Specifically, we measure ethics, service, environmental performance, competence, credibility, value, community, innovation, and treatment of employees.

In a digital and increasingly connected world, our customers expect instant information and real-time access to SaskPower through their preferred communication channels — whether that is phone, face-to-face, or online engagement. In response, we have developed a four-pillar customer experience strategy that guides our efforts to deliver on these expectations:

1. Building a workplace environment that puts the customer first and emphasizes the benefits of focusing on customers.
2. Meeting customer expectations during every interaction by consistently providing high-quality, efficient, convenient service on their terms.
3. Developing services that customers value and which provide greater control over power use and opportunities to minimize the impact of rate increases.
4. Building positive customer relationships through promotion of programs and services and frequent customer engagement.

Work resulting from this strategy that has improved residential customer experience includes:

- Introducing a Live Chat on our website so customers can interact with an agent over online chat technology instead of having to call the Customer Care Centre. In its first year of operation, we recorded over 870 chats.
- Setting up a travelling video booth in a variety of Saskatchewan locations so customers could ask questions on a wide range of topics, including billing, efficiency, services, and SaskPower’s plans for the future. Our video responses were posted on social media.
- Testing the use of a dedicated radio broadcast channel – which we promoted with local billboards – to provide updates for customers travelling near construction of the Pasqua to Swift Current Transmission Line.
- Adding functionality to the SaskPower mobile app so customers can see an account overview, submit their meter reads, and subscribe to outage alerts for up to 25 communities.
- Posting an outage map on our website and through the SaskPower app that allows customers to geographically view planned and unplanned outages.

For five of our key and major account customers with a large number of meters, we added to our service offerings by piloting a new “Power Up” app that identifies all meter points, flags outages, and allows them to report hazards. SaskPower plans to expand this app’s capabilities in 2019-20 as we make it available to more eligible customers.

#### DEMAND SIDE MANAGEMENT (DSM)

Offering our customers the ability to reduce their electricity use through targeted energy efficiency and conservation programming (Demand Side Management) is another key element of our commitment to corporate responsibility and sustainability.

For our residential customers, we offer free online tools to estimate the consumption and cost of their home lighting and electrical devices. These tools deliver customized information that can be used to make low-cost changes in power usage or improve a home’s efficiency.

For years, SaskPower has also offered price discounts on energy-efficient home lighting through local retailers. In 2018-19, our Residential Retail Discount Program was offered in approximately 230 retail locations across the province and resulted in over 14,000 customer conversations about energy efficiency and conservation.



Since it began in 2008, Saskatchewan residential customers have purchased over 5.3 million energy-efficient light bulbs and strings, saving over 74 MW — equivalent to powering over 18,000 homes for a year. Because the residential lighting market has largely shifted to energy efficient LED lighting, 2018-19 was the last year for this program.

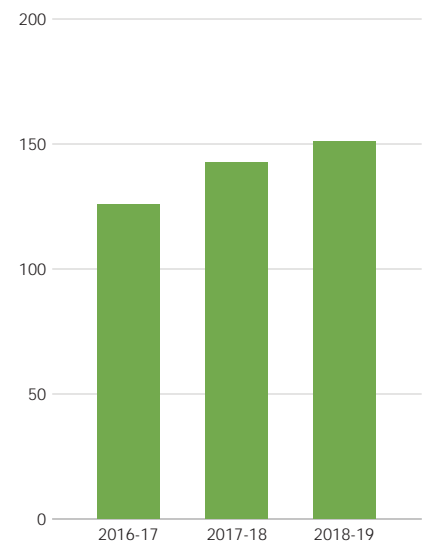
Specific energy efficiency programs that have been designed to address the unique needs of small and medium business customers include:

- **Commercial Lighting Incentive Program:** This initiative promoted the adoption of energy efficient lighting by providing rebates on select energy efficient lighting and equipment. The program was fully subscribed, and delivered through local distributors and electrical contractors.
- **Walk-through assessment:** SaskPower provides online and walk-through facility assessments to help business customers understand their power use and identify opportunities to improve energy efficiency.
- **Commercial Energy Optimization Program:** This program provides incentives for the development and implementation of custom projects to improve energy efficiency in buildings.

- **Municipal Ice Rink Program:** Community and municipal ice rinks have been able to improve operations after a walk-through facility audit that assessed equipment and operating practices. Incentives were offered to implement audit recommendations and improve energy efficiency. Customers can continue to manage rink operating costs with power-saving information from the Rink Manual Handbook.
- **Commercial HVAC:** Offered in conjunction with SaskEnergy, this program provides incentives to install Energy Star®-qualified high efficiency HVAC units when retrofitting furnaces, boilers, and rooftop units.
- **Online tool for commercial customers:** Similar to the residential online tool, we offer a free online tool to help commercial customers assess their energy costs and determine whether efficiency upgrades could save them money.

Meanwhile, our Industrial Energy Optimization Program has identified opportunities with Saskatchewan industrial customers to utilize more efficient equipment and production processes to reduce electricity consumption and power costs.

RESIDENTIAL CUSTOMERS HAVE PURCHASED OVER 5.3 MILLION ENERGY-EFFICIENT LIGHT BULBS THROUGH SASKPOWER'S DEMAND SIDE MANAGEMENT PROGRAMMING.



**DEMAND SIDE MANAGEMENT**

■ Cumulative peak demand savings (MW)

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# 23

## solar projects accepted through SaskPower's Power Generation Partner Program

SaskPower is currently reviewing its full suite of DSM programs to ensure they reflect changing market conditions and shifting customer needs. Our company continues to help customers with managing their energy usage through information and online tools. One option being reviewed is the addition of a low-income energy efficiency program, as traditional programs have generally not been designed to be easily accessible to this target audience.

SaskPower will also consider the results from recently completed research with residential and commercial customers on the value of DSM and green technologies as we complete our review.

### CUSTOMER SELF GENERATION

Responding to growing interest in customer self generation, SaskPower continues to offer two renewable and non-renewable carbon neutral generation programs.

Through the Net Metering Program, customers can install power generating systems with capacities of up to 100 kilowatts (kW). Participants are credited for excess electricity transmitted to the grid, which they can use to offset future electricity bills.

During 2018-19, we received almost 900 net metering applications, representing a combined generating capacity of over 12 MW, and provided more than \$3.3 million in program rebates directly to customers.

In 2018-19, SaskPower also launched the Power Generation Partner Program as a replacement for the Small Power Producers Program and the Flare Gas Generation Program. The revamped program provides options for customers to generate power at capacities up to 1 MW using renewable technologies, and up to 5 MW using non-renewable carbon neutral technologies.

Throughout 2018-19, we accepted 23 solar projects and 15 flare gas projects and met our first-year program capacity limit of 10 MW for renewables and 25 MW for non-renewable carbon neutral technologies.

### ELECTRIC VEHICLE STRATEGY

Though electric vehicle adoption is currently low in Saskatchewan, our ongoing stakeholder engagement tells us that significant growth is anticipated over the next decade. Knowing that our customers expect us to play a role in this emerging market, we have recently completed an electric vehicle strategy.

Short-term work we're focusing on as a result of this strategy includes:

- Participating in provincial electric vehicle working groups.
- Providing information on electric vehicles, our policies, and off-peak charging.
- Identifying opportunities for pilot programs to enhance learnings about home/work charging station impacts.



SOLAR INSTALLATIONS ARE GROWING IN SASKATCHEWAN IN STEP WITH INCREASING CUSTOMER SELF GENERATION.



## CUSTOMER DATA PROTECTION

SaskPower takes data security seriously and we have implemented measures to ensure customer data is protected. Our systems have strong security measures in place, such as specialized security software and strict controls on how they are configured and who has access to them.

All access to data repositories is centrally managed and requires access approvals. Meanwhile, the Data Loss Prevention Program that SaskPower has established helps guard against unauthorized and unwanted flow of information outside of SaskPower.

SaskPower is building cyber security resilience throughout our company. We have established a review process for new information technology projects and purchases that includes both a privacy impact assessment and a threat and risk assessment to identify privacy requirements and appropriate security controls.

## STAKEHOLDER AND INDIGENOUS ENGAGEMENT

SaskPower defines stakeholders as people, groups and organizations who are perceived to be directly or indirectly affected by SaskPower operations as well as have interests in, and/or the ability to influence SaskPower operations. Our role is to

build and execute credible and transparent processes to ensure stakeholders and rights holders can meaningfully participate in SaskPower projects and decisions.

In an operating environment that is characterized by a high degree of change and uncertainty, it is essential that the voices of our customers and stakeholders are heard and considered as we plan for the company's future. Our Stakeholder Engagement Policy and our Indigenous Relations Policy are essential guiding documents — they both articulate how we aspire to build positive long-term relationships with Indigenous communities and a wide range of stakeholders.

# STRENGTHENING RELATIONSHIPS WITH INDIGENOUS COMMUNITIES

**As Wayne Rude reflects on the history between SaskPower and Pheasant Rump Nakota First Nation, he acknowledges it wasn't that long ago that the notion of any sort of positive relationship existing between both parties seemed like a faint possibility.**

Rude is a Senior Business Advisor with SaskPower's Indigenous Relations team. He says issues trace back to the 1960s, when SaskPower obtained an easement to build a transmission line through farmland in southeastern Saskatchewan. By the 1980s, that land had been acquired by Pheasant Rump as part of a settlement with the Government of Canada that acknowledged original reserve lands were inappropriately taken away over 100 years ago.

Fast forward to a few years ago, and SaskPower was facing challenges as Pheasant Rump leadership sought compensation for ongoing use of the existing transmission line corridor on their land. "The issue went back and forth for more than a year between SaskPower, Pheasant Rump and the federal government," Rude recalls. Ultimately, SaskPower was able to come to an agreement to secure the necessary ongoing use of the transmission line easement.

As difficult as those negotiations were at times, Rude says they also offered a silver lining that profoundly changed the relationship with Pheasant Rump. Through the course of ongoing meetings on the transmission line, Rude says he found opportunities to talk to Chief and Council about other SaskPower programs that could help address pressing needs on the reserve.

The result: Pheasant Rump now operates solar installations on several of its community buildings under SaskPower's Net Metering Program, and the entire community is enjoying nine new LED streetlights installed by SaskPower.



KARA MCARTHUR, ASSISTANT LAND MANAGER, PHEASANT RUMP NAKOTA FIRST NATION, IN FRONT OF A COMMUNITY BUILDING SOLAR INSTALLATION.

Another important legacy is the trust that was built between Pheasant Rump and SaskPower.

"We are thrilled to be using new technology, like solar power panels on our community buildings, to protect the environment and prepare ourselves for the future," says Chief Ira McArthur.

"Pheasant Rump is committed to working with our partners like SaskPower to improve the infrastructure that serves our citizens. Thanks to comprehensive planning and effective leadership, the improvements we make today will benefit our communities locally and beyond."

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**\$1.7M**  
invested in community  
educational  
programming and  
initiatives

Much of our engagement is done by SaskPower's stakeholder engagement team and follows the International Association for Public Participation (IAP2) core values. This team works with many other parts of our business, including Indigenous Relations, Government Relations, Environment, and our Land Department.

In 2011, SaskPower joined the Canadian Council for Aboriginal Business' Progressive Aboriginal Relations (PAR) Program. The PAR certification program confirms corporate performance in Indigenous relations under four pillars — leadership actions, employment, business development and community relations — and can be awarded at a Bronze, Silver or Gold level status. SaskPower maintains a Gold level status.

#### **INVESTING IN THE COMMUNITIES WE SERVE**

Our connection with customers extends to making a positive contribution toward the health and well-being of the communities where they live and work. Through our Community Partnerships and Investment Policy, we directed over \$1.7 million last

year to educational programming and community initiatives that align with our company's key priorities: workforce excellence, safety, and conservation and efficiency.

Community investment highlights from 2018-19 included:

- The signing of a three-year partnership with the University of Saskatchewan that will support first-year First Nations, Inuit, and Métis students wanting to enter diverse STEM (science, technology, engineering, and math) degree pathways.
- Continued work with a variety of agriculture and construction industry associations to promote the importance of working safely around electricity.
- Supporting the work of Salthaven West and the Wildlife Rehabilitation Society of Saskatchewan in their efforts to care for and release injured wildlife back into their natural habitat.



### **TOWARD 2030 FUTURE FOCUS: CUSTOMER & COMMUNITY ENGAGEMENT**

- Work with customers to develop mutually beneficial options in how they meet their power needs, including through self-generation.
- Advance sustainable customer DSM programs and green technology partnerships.
- Execute collaborative engagement with customers and stakeholders in the planning and operation of the power system while enhancing confidence in SaskPower.
- Develop and institute programs and initiatives that strengthen Indigenous relations.

# PEOPLE

A photograph of two workers in an industrial setting. They are wearing orange hard hats and safety glasses. The worker in the foreground is wearing a dark blue shirt with a name tag that says 'SaskPower'. The background is blurred, showing industrial equipment.

WE BELIEVE THAT NOTHING IS MORE IMPORTANT THAN THE HEALTH, SAFETY AND WELL-BEING OF SASKPOWER'S EMPLOYEES, CONTRACTORS AND THE PUBLIC.

THE SUCCESS OF OUR COMPANY IS DEPENDENT UPON THE STRENGTH OF OUR WORKFORCE. WE WORK TO BE AN EMPLOYER OF CHOICE, WITH DEDICATED, ENGAGED EMPLOYEES.

WE WILL STRIVE TO ENSURE OUR WORKFORCE IS HIGH PERFORMING, ACCOUNTABLE, AND AS DIVERSE AS THE COMMUNITIES WE SERVE.

The expectations being placed upon SaskPower's employees have never been higher. Only with a diverse, talented and engaged workforce will we succeed in developing and implementing the innovative solutions required to sustain our company in the near and long term. This means that we must not only retain our experienced staff — we also need to make additions to our workforce that bring the skills required for future success.

Measuring the level of employee engagement through regular surveys is one of the most important ways we monitor the health of our workforce. In 2018-19, SaskPower's overall engagement score was 64% — this matched our 2017-18 result. Beginning in 2018-19, we will only administer a full employee survey every second year, but still complete shorter pulse surveys on the off-years. This approach will give us the necessary time to develop effective and meaningful action plans driven by the results of the larger survey while not losing sight of how employee sentiments might be shifting on an annual basis.

Building a strong and accountable corporate culture has been identified by many employees as a top priority. SaskPower employees and contractors are already held accountable to the company's Code of Conduct, Respectful Workplace and Diversity Policies.

In 2018-19, we engaged front-line employees to find out more about the type of culture they want to see at SaskPower, as well as what they expect from their leaders. We're already using this information to define key behaviour expectations for all employees, including our leadership.

Support for our leadership group has been expanded to include customized

training that focuses on topics such as leadership character and values; building resilience; complexity and decision-making; engagement and coaching; and planning and execution. This refreshed leadership training approach combines more frequent and shorter modules with regular check-ins to better reinforce learning. Additionally, a Management Essentials Program for supervisors focuses on the critical safety, customer, environment, and people management knowledge and skills that this group requires.

Knowing that 20% of the current workforce is likely to retire over the next five years and that competition for new recruits is intense, we are engaged in workforce planning that will secure the employees we need to address long-term business objectives. Revamped succession planning processes to assess and develop talent more effectively are a key component of workforce planning. We recently introduced a nine-box talent matrix to better assess talent performance vs. potential. At the same time, we are integrating the Emotional Quotient Inventory (EQi) self-assessment tool into the process.

Going hand-in-hand with employee engagement and workforce planning are efforts to improve career development opportunities — another critical need

identified by employees during our engagement survey. We are expanding our current Corporate Mentorship Program, which has already led to 169 pairings in support of career planning and opportunities for personal development. Other key initiatives set for this year include exploring the feasibility of job shadowing, job rotations, and expressions of interest that can help employees gain exposure and experience in new roles.

#### A DIVERSITY OPPORTUNITY

The significant workforce turnover we are anticipating presents a unique opportunity to build a more diverse employee population within SaskPower. Our workforce planning efforts include strategies to improve diversity and inclusion by building the corporation's diversity brand, expanding employment outreach, leveraging external partnerships, creating targeted diversity programs, and improving data collection and metrics.

SaskPower is proud of our success to date in building a diverse workforce. In 2018-19, for the 10th year in a row we were recognized as one of Canada's Best Diversity Employers. While our workforce diversity goal for the fiscal year was 32% representation, we ended up achieving a 42% workforce diversity representation.



The result can be directly tied to the SaskPower Diversity & Inclusion Census that was conducted in late 2018, in partnership with the Canadian Center for Diversity & Inclusion (CCDI). Employee participation in the census was 68% — a positive result considering that SaskPower had not conducted a full workforce census in over a decade.

While we celebrate our achievements, we also recognize there is much work left to be done on diversity and inclusion. Our focus in the near term will include:

- A regular diversity and inclusion training module in management training.
- Ongoing educational events hosted by the SaskPower Diversity & Inclusion Committee and the six Employee Resource Groups: the Indigenous Employees Network; the LGBTQ2S+ Network; the Network of Employees for Disabilities; PowerGen (leadership development network); the Visible Minorities Network; and the Women’s Resource Group.

#### SAFETY

Our employees are constantly reminded

that safety must be a part of everything they do in their day-to-day work. There are few industries where adhering to safe work practices is so critical — and where even a momentary distraction can have horrific consequences.

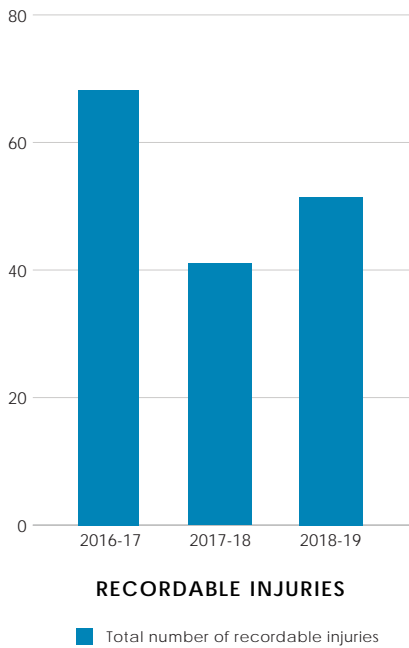
For more than 10 years, SaskPower has used a Safety Management System (SMS) aligned with the OHSAS 18001 Standard to continuously improve and protect the safety of our employees, contractors, and the public. To ensure clear roles and accountability, a comprehensive SMS governance structure is in place to ensure all levels of our workforce — from field worker to the Executive team — have input and are invested in our safety success.

Our internal Health and Safety Department manages our SMS and monitors its ongoing effectiveness. The department includes compliance and monitoring specialists who spend the bulk of their time in the field, while business partners guide SaskPower’s leadership on new initiatives as well as the outcomes of investigations and verifications. There is also a team within the department that investigates major and critical incidents, while other specialists develop new safety standards and measure performance.

RECRUITMENT OF INDIGENOUS PEOPLE, PERSONS WITH DISABILITIES, VISIBLE MINORITIES AND WOMEN IN UNDERREPRESENTED POSITIONS IS A KEY FOCUS OF SASKPOWER’S DIVERSITY EFFORTS.

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**68%**  
employee  
participation in  
Diversity & Inclusion  
Census



Recent efforts to improve our safety performance were recognized when we received the Canadian Electricity Association President’s Award of Excellence for Employee Safety in Distribution – Group 2. The award recognized SaskPower’s improvement efforts since 2015, when we had the second-worst safety record among Canadian utilities. While we are proud of this and other recent safety accomplishments, we remain resolute in achieving our goal of zero injuries.

As part of our commitment to continuous safety improvement — and in response to stakeholder feedback — our safety targets were subsequently refreshed to ensure we continue to challenge safety performance. These changes to our metrics will allow for more visibility into corporate groups that require support to understand incidents and how to progress to zero injuries. Meanwhile, an extensive review of two new measures was completed during the year: All Injury Frequency Rate, and Corrective Actions from Incidents. These two new metrics will be integrated into the Health & Safety Index — which appears on SaskPower’s Corporate Balanced Scorecard — in 2019-20.

A key corporate safety achievement in 2018-19 was the development and implementation of a fatigue management

standard. An extensive change management plan was developed and executed to help secure employee buy-in and build understanding — a critical step as internal enforcement efforts continue to ramp up.

Last year also saw us complete the full implementation of ISNetwork (ISN), which allows SaskPower to streamline safety and procurement processes by clearly communicating and monitoring a range of safety requirements and expectations to our contractors. Where performance is substandard, we’ve begun using the data collected through ISN to initiate conversations with our contractors about their safety compliance.

Adoption of our new Hazard/Aspect & Risk Assessment (HARA) continued through the year. HARA is used to proactively identify safety hazards and environmental aspects; evaluate risk; and apply multiple controls to eliminate or reduce the risk to within defined tolerance levels. We also took steps to improve the safety leadership of our field supervisors — particularly those who oversee employees conducting high-risk work — by rolling out a new supervisory coaching program.

Aviation safety has been given higher priority with the hiring of a Specialist, Monitoring and Compliance, Aviation. Processes and forms have been created so



IN 2018-19, SASKPOWER RECEIVED THE CANADIAN ELECTRICITY ASSOCIATION PRESIDENT’S AWARD OF EXCELLENCE FOR EMPLOYEE SAFETY IN DISTRIBUTION.

we can better monitor helicopter usage and ensure the correct aircraft is assigned to each job.

### **PUBLIC SAFETY**

Customers and the general public remain a vital part of our safety efforts. Every year, there are numerous preventable power line contacts in Saskatchewan. Each spring, we launch a safety campaign to remind customers to take the time to 'Look up and Live' while working near power lines.

Our campaign includes radio ads, billboards, event displays, and a team of safety ambassadors that visited over 150

communities and 260 businesses across the province during last year's campaign.

In partnership with a range of external stakeholders — including the Prairie Agriculture Machinery Institute — we are also working on strategies to move beyond awareness to action when it comes to preventing line contacts.

At the same time, we continue to use a diverse set of tactics — ranging from a provincial safety ambassador tour, traditional advertising, and experiential marketing — to share our safety messages with farmers, construction workers and customers across the province.

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**150**  
communities visited  
by SaskPower Safety  
Ambassadors



## **TOWARD 2030 FUTURE FOCUS: PEOPLE**

- Ensure that human resources and safety policies, programs, services, and systems align to SaskPower's corporate strategy and enable high performance.
- Equip employees with the capacity to act in alignment with our core values of safety, openness, collaboration, and accountability.
- Determine SaskPower's current and future workforce needs and institute risk mitigation strategies.
- Enhance SaskPower's ability to attract, develop and retain a diverse and engaged workforce.
- Continue to deliver training and development programs to close gaps in employee knowledge, skills and abilities and ensure workforce safety.



# FINANCIAL & OPERATIONAL RESPONSIBILITY

SASKPOWER'S AIM IS TO PROVIDE COMPETITIVE RATES IN THE FACE OF AN UNPRECEDENTED PERIOD OF INVESTMENT IN INFRASTRUCTURE RENEWAL AND CLEANER ENERGY SOURCES. WE RECOGNIZE OUR ROLE IN SUPPORTING THE ECONOMY AND QUALITY OF LIFE, AND THE NEED TO PRESERVE OUR FINANCIAL STRENGTH IN THE FACE OF ELECTRICITY MARKET TRANSFORMATION.

SUCCESSFULLY MEETING OUR CORPORATE MISSION MEANS SECURING THE PRESENT AND FUTURE SUPPLY OF ELECTRICITY WHILE ADDRESSING ENVIRONMENTAL RESPONSIBILITIES AND SUPPORTING SASKATCHEWAN'S ENERGY TRANSITION.



**Underpinning our sustainability commitments related to environmental and social responsibility is the need for ongoing strong fiscal and operational performance. This requires us to balance several issues simultaneously — managing critical infrastructure investments, ensuring rates are affordable, and managing our debt.**

In 2018-19, SaskPower reported a consolidated net income of \$197 million. Our return on equity of 7.9% exceeded budget, moving us closer to our long-term target of 8.5%. As well, our per cent debt ratio improved to 74.1% and remains within our long-term target of 60 to 75%. Based on our current forecast, we anticipate further financial improvements will be realized in the coming year.

### **TRACKING AFFORDABILITY AND COMPETITIVENESS**

The affordability of electricity is critical to quality of life and economic development in Saskatchewan. Our company continues to see cost pressures mount: from capital expenditures related to transitioning to a lower carbon future, to carbon pricing, to renewing Saskatchewan's transmission and distribution infrastructure. As a result, it will be critical for SaskPower to continue engaging in continuous improvement and strategic cost reduction to ensure rate competitiveness.

SaskPower does not plan to apply for a rate increase for 2019-20, marking the second consecutive fiscal year that we will not implement a rate adjustment. Internal efficiency efforts and lower than forecasted natural gas prices are the primary drivers behind this decision.

To assess our ongoing efforts related to efficiency, quality, and cost management, SaskPower measures a wide range of key metrics, some of which are included in our Corporate Balanced Scorecard. The complete scorecard can be found at [saskpower.com](http://saskpower.com).

SaskPower's Corporate Balanced Scorecard measures our progress towards ensuring our system average rates are less than or equal to the system average rates for customers served by utilities primarily dependent on thermal generation (using coal, natural gas, nuclear or oil). Using annual Hydro-Québec survey results, our company compares our rates against other thermal utilities within Canada.

As of the most recent survey date of April 1, 2018, SaskPower's system average rates improved to 101% of the system average rates for thermal utilities within Canada, compared to 105% in April 2018.

### **MANAGING EXPENSES**

Another measure in our Corporate Balanced Scorecard compares the annual growth of SaskPower's operating, maintenance, and administration (OM&A) expense per customer account against the annual growth of the Saskatchewan Consumer Price Index (SKCPI). This measure is intended to

illustrate how efficiently OM&A is being managed.

SaskPower's average OM&A/customer account grew by 3.1% in 2018-19, which exceeded the SKCPI growth of 1.8% over the same period. This increase was driven by the costs associated with emergency maintenance required after severe storms during the year.

Beginning in 2019-20, growth in OM&A/customer account will be measured based on a five-year average, rather than an annual basis, to normalize the year-to-year swings in OM&A related to the maintenance schedules for generation units. Overhauls vary significantly in cost and frequency — from every second year to every four years or based on hours of operation — depending on the specific generation unit.

### **INTERNAL EFFICIENCY**

Since 2015, SaskPower's continuous improvement and strategic cost reduction efforts have led to the review of existing processes and procedures in order to identify, prioritize, and implement cost-effective changes or new initiatives that can improve efficiency. To date, we have registered \$155 million in OM&A budget reductions as a result of these efforts.

## PROCUREMENT

Significant effort is being invested inside SaskPower to make our procurement and supply chain activities not only more efficient, but to also ensure they better reflect the needs of our vendors.

SaskPower works directly with over 1,000 businesses in the generation and delivery of power for our province. Approximately 70% of the procurement we award every year goes to Saskatchewan suppliers, with the exception of the E.B. Campbell Hydroelectric Station life extension project.

To help maintain positive relationships with these suppliers, SaskPower hosted 12 supplier events in 2018-19, including a dedicated Indigenous supplier forum. We also participated in the Aboriginal Business Match initiative in Regina, which brings together Indigenous and non-Indigenous entrepreneurs, businesses and government agencies through a digital platform where entrepreneurs and business owners can schedule investor face-to-face meetings.

Our Indigenous Procurement Policy has meant that Indigenous people and communities can increasingly benefit from our construction projects and operations. The policy has played a key role in the awarding of significant contracts to Indigenous suppliers, including: power pole supply, vegetation management, transmission line structures/hardware, and consulting

services. By joining the Aboriginal Procurement Champions Group through the Canadian Council for Aboriginal Business, SaskPower has further committed to increase opportunities for Indigenous businesses.

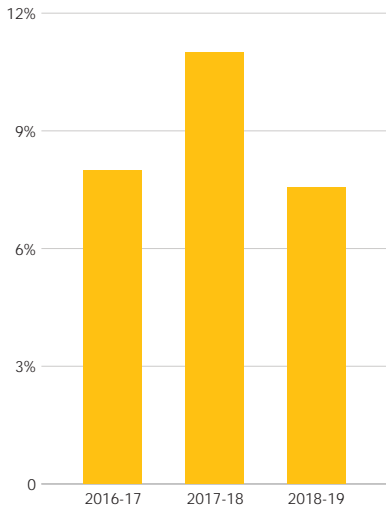
## SYSTEM GROWTH AND RELIABILITY

While SaskPower takes significant steps to reduce internal expenses through efficient operations, new cost pressures are resulting from the fact that the demand for electricity continues to grow in Saskatchewan.

In 2018-19, SaskPower's peak demand reached 3,723 MW. This marked the first year since 2010 that SaskPower did not surpass the previous system peak record. However, year-over-year electricity sales still increased, as they have every year since 2009.

To ensure we make the right infrastructure investments at the right time, our internal supply planning group creates short- and long-term supply plans to help guide decision-making. Specifically, the long-term plan has been built to accommodate changes in such key inputs such as the load forecast, fuel forecast, construction costs, and emissions regulations.

Like other utilities across North America, SaskPower is facing the need to make significant investments in renewing existing infrastructure. Much of our existing transmission and distribution system has



### INDIGENOUS PROCUREMENT

■ Percentage of total Saskatchewan procurement

THE NEW 230/138-KILOVOLT PASQUA TO SWIFT CURRENT TRANSMISSION LINE WILL MOVE ELECTRICITY FROM THE CHINOOK POWER STATION.



reached — or even passed — its expected years of service. It is not enough to merely replace aging assets. We must also modernize our grid, so it is robust enough to handle increased amounts of renewable energy and customer participation.

When it comes to maintaining Saskatchewan's electricity grid, SaskPower is using Lifecycle Asset Management Plans to ensure that the most essential and cost-

effective work is done first. One of our bigger initiatives is our LED Streetlight Conversion Program. Over 10 years, we will replace 100,000 high-pressure sodium vapour bulbs with energy-efficient LED lighting. Because the LEDs will last longer, this project will reduce costs and free up crews to focus on other important maintenance. To date, 8,165 LEDs have been installed with an estimated life cycle cost savings of \$4.9 million.

As we plan and execute system maintenance and modernization, we must ensure our efforts align with North American Electric Reliability Corporation (NERC) standards. SaskPower is subject to compliance monitoring activities which include on-site audits, self-certifications, and self-reports. The number of requirements that we follow has increased as we now include the subset Critical Infrastructure Protection (CIP) of the NERC standards.

## GROWING INDIGENOUS PROCUREMENT

As a Crown corporation, SaskPower recognizes the important role we play in our province's economic development. Nowhere is that more evident than in the work that SaskPower has done in partnership with Peter Ballantyne Cree Nation to cultivate job opportunities for community members and generate new sources of revenue.

SaskPower and Peter Ballantyne Cree Nation have had a long-standing connection, owing to the fact that the community is adjacent to our company's Island Falls Hydroelectric Station. However, because of the impact of the facility's operation on traditional community lands, the relationship has sometimes been challenging.

SaskPower's decision to develop an Indigenous Procurement Policy was one key factor in helping to improve things, says Ranjith Narayanasamy, SaskPower's Senior Business Advisor of Indigenous Procurement: "The policy has served as a reason for both sides to get together and identify how some of SaskPower's needs might be met through skills and expertise found in the community. We brought them a need that we had — support in our provincial wood pole inspection and remediation program — and they responded."

Once they became aware of the opportunity, Peter Ballantyne Cree Nation leadership leveraged the expertise within their existing forestry business to train their members on the specific skills required for this SaskPower work. At the same time, they invested in the tools and equipment necessary to do the job.

Because Narayanasamy and other SaskPower procurement staff worked directly with Peter Ballantyne Group of Companies officials, both sides were soon able to finalize a five-year Master Services Agreement for wood pole recycling, stores deliveries, and site clean-up services. To date, the agreement has created eight new jobs for community members and has generated \$4 million in revenue since 2016.

"Together with the supportive SaskPower staff, we have found ways to add value to the SaskPower system and have created a successful Aboriginal



PHOTO: DES NEDHE DEVELOPMENT

Chief Peter A. Beatty, Peter Ballantyne Cree Nation business with new jobs. We look forward to working with SaskPower in finding ways to grow our business relationship," says Trevor Ives, CEO, Peter Ballantyne Group of Companies.

At the same time, SaskPower continues to work with Peter Ballantyne Cree Nation in exploring other work opportunities for its members. In fact, SaskPower helped Northlands College organize a unique bootcamp in northern Saskatchewan where people interested in a career as a powerline technician (PLT) — not only from Peter Ballantyne but from communities across northern Saskatchewan — could spend a few days getting a taste of what it would be like to participate in the full PLT training program.

From that small investment, Narayanasamy says some Peter Ballantyne Cree Nation members entered SaskPower's formal PLT training: "SaskPower's Indigenous Procurement Policy will continue to be a tool we'll rely on to open doors and help uncover new ways that Indigenous communities can benefit from SaskPower's ongoing infrastructure investments and maintenance work across the province."

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**7,500**  
smart meters installed  
during the second  
phase of a Commercial  
& Industrial Customer  
Class smart meter pilot  
program

### ADVANCED METERING INFRASTRUCTURE (AMI)

AMI is another important tactic in our strategy to modernize the SaskPower grid. AMI meters not only deliver near-real-time data that supports accurate billing, they also provide detailed information about customer outages and power quality issues.

SaskPower is pursuing a measured approach to AMI meter deployment through a series of pilot projects with our Commercial & Industrial customers so we can test meter deployment processes and confirm that the end-to-end AMI system is functioning correctly, accurately, and safely. Residential deployment for smart meters is expected to begin in the next two to three years and will include robust meter testing, field trials, and tightly controlled customer pilots.

### RELIABILITY AND CLIMATE CHANGE ADAPTATION

Recently published future climate scenarios reveal a challenging operating environment in Saskatchewan, including potential for extreme weather, drought, fire, ice storms, and winter floods. Currently, decisions and preparations are captured in our company's Asset Management Program, with resources allocated based on the likelihood and impact of weather-related events.

Contingency plans are also in place, including an Incident Command System that is used in major outages. At the same time, a Dam Safety Program has been implemented to ensure maintenance standards consider future risks for structures and spillways.



## TOWARD 2030 FUTURE FOCUS: FINANCIAL & OPERATIONAL RESPONSIBILITY

- Ensure our capital program achieves an optimal balance between system performance, emissions performance, debt management and rate competitiveness.
- Make it easier for suppliers to do business with us while balancing cost and risk.
- Investigate the potential for new services that preserve existing revenue and generate additional income.
- Evaluate potential shifts in our vertically integrated business model as well as opportunities for joint ventures and opportunities with other utilities.
- Evolve our continuous improvement programs and embed an optimization mindset.

# PERFORMANCE INDICATORS & SYSTEM MAP

FORWARD-LOOKING INFORMATION OR STATEMENTS INCLUDED IN THIS CORPORATE RESPONSIBILITY & SUSTAINABILITY REPORT ARE PROVIDED TO INFORM READERS ABOUT MANAGEMENT'S ASSESSMENT OF SASKPOWER'S FUTURE PLANS AND OPERATIONS. THEY ARE BASED ON SASKPOWER'S ESTIMATES AND ASSUMPTIONS CONCERNING FUTURE RESULTS AND EVENTS. DUE TO THE RISKS AND UNCERTAINTIES INHERENT IN ANY FORECASTED OUTLOOK, THE ACTUAL RESULTS COULD DIFFER MATERIALLY FROM THOSE ANTICIPATED. THESE RISKS AND UNCERTAINTIES INCLUDE, BUT ARE NOT LIMITED TO, NATURAL GAS PRICES; COAL AND HYDRO AVAILABILITY; WEATHER; ECONOMIC CONDITIONS; NUMBER OF CUSTOMERS; NEW AND CHANGING REGULATIONS; AND MARKET CONDITIONS IN OTHER JURISDICTIONS.

# PERFORMANCE INDICATORS

## ENVIRONMENTAL PROTECTION & CLIMATE CHANGE

Topic	2016	2017	2018	2019 Target	Notes
Carbon dioxide (CO <sub>2</sub> ) emissions <sup>1,2</sup> (tonnes)	15,000,000	16,900,000	15,900,000	TBD	Emissions from fossil fuel generation. CO <sub>2</sub> emissions for 2018 — as well as 2016 and 2017 — calculated in accordance with Environment and Climate Change Canada regulations as outlined in <i>Greenhouse Gas Quantification Requirements</i> dated December 2018.
Nitrogen oxide (NO <sub>x</sub> ) emissions <sup>1,2</sup> (tonnes)	29,000	30,000	31,000	TBD	Emissions from fossil fuel generation. Calculated in accordance with National Pollutant Release Inventory requirements.
Sulphur dioxide (SO <sub>2</sub> ) emissions <sup>1,2</sup> (tonnes)	77,000	77,000	76,000	TBD	Emissions from fossil fuel generation. Calculated in accordance with National Pollutant Release Inventory requirements.
Number of priority spills <sup>1</sup>	7	6	3	0	Priority spills exclude all regulated releases as defined by the Saskatchewan Ministry of Environment or other regulators.
Outstanding pieces of equipment subject to the PCB Action Plan	86,000	66,000	54,000	19,000	These pieces of equipment have been identified as potentially containing PCBs. They are slated for inspection, after which they will be confirmed as PCB-free, removed from service, or have their PCB-contaminated oil removed.

1. Metrics are measured and reported on a calendar-year basis.

2. SaskPower has targeted a 40% reduction of greenhouse gas emissions from 2005 levels by 2030. Revisions to yearly CO<sub>2</sub>, NO<sub>x</sub> and SO<sub>2</sub> targets are under development due to recent regulatory changes.

Topic	2016-17	2017-18	2018-19	2019-20 Target	Notes
Renewable generation portfolio (%)	25	25	26	24	Renewable generation capacity as a percentage of total installed generation capacity (including IPP-contracted capacity). This measure is expected to slightly decrease for 2019-20 with the addition of the natural gas-fired Chinook Power Station, which is required to support subsequent additions of intermittent solar and wind generation.
Demand Side Management peak demand/energy savings (MW/GWh)	17.7/75.8	14.2/56.1	11.4/54.7	6.0/45.0	The reduction in peak electricity demand is measured in MW and the volume of energy saved is measured in GWh.

## CUSTOMER & COMMUNITY ENGAGEMENT

Topic	2016-17	2017-18	2018-19	2019-20 Target	Notes
Total number of public fatalities	1	1	3	0	
Customer Experience Index					Service provider and methodology changed in 2018-19 (previously measured on a 10-point scale which cannot be converted for comparison purposes).
• residential	5.8	5.9	69	69	
• small & medium business	7.3	7.2	71	71	
• key & major account	8.0	7.7	80	80	
Competitive rates (thermal utilities) (%)	97	105	101	≤100	A comparison of customer rates against other thermal utilities within Canada using Hydro Québec's annual survey results.
System average interruption duration index (SAIDI) (Distribution) (hours)	5.1	6.9	7.0	5.9	A measure of the service interruption length in hours that an average customer experiences in one year.
System average interruption frequency index (SAIFI) (Distribution) (outages)	2.2	2.4	2.5	2.4	A measure of the number of outages that an average customer experiences in one year.
SAIDI (Transmission) (minutes)	125	227	464	140	A measure of the average duration of interruptions in minutes experienced at a bulk electric service delivery point in one year.
SAIFI (Transmission) (outages)	2.8	3.0	5.0	3.1	A measure of the average number of forced interruptions experienced at a bulk electric service delivery point in one year.

## PEOPLE

Topic	2016-17	2017-18	2018-19	2019-20 Target	Notes
Employee engagement scores (%)	55	64	64	66	Service provider and methodology changed in 2017-18 (scores cannot be converted for comparison purposes).
Workforce diversity (%)	N/A	32	42 <sup>3,4</sup>	42	The percentage of permanent employees that: <ul style="list-style-type: none"> <li>• Self-identify as being in one or more designated equity groups (Indigenous, visible minorities, and/or persons with disabilities), and/or</li> <li>• Are women in positions or occupations where there is less than 45% representation.</li> </ul>

3. In 2018-19, a Diversity & Inclusion Census was administered to all permanent employees. Prior to this, results for Indigenous people, persons with disabilities and visible minority categories were determined based on the completion of self-declaration forms provided in new employee packages.

4. Restated from SaskPower's 2018-19 Annual Report (47.9%). Our service provider changed the methodology from reporting the number of respondents who self-identified as a visible minority as a percentage of the total employee population to extrapolate the percentage of respondents who self-identified as a visible minority to the total employee population. This change was made without SaskPower's approval and was disclosed to SaskPower after the Annual Report was published.

# PERFORMANCE INDICATORS

## PEOPLE (CONTINUED)

Topic	2016-17	2017-18	2018-19	2019-20 Target	Notes
Number of employee fatalities	0	0	0	0	
Recordable employee injuries <ul style="list-style-type: none"> <li>total</li> <li>frequency rate</li> </ul>	69 2.3	41 1.5	52 1.8	N/A 2.5	<p>A recordable injury is any occupational injury/illness that results in an employee experiencing:</p> <ul style="list-style-type: none"> <li>a) Fatality;</li> <li>b) Lost-time injury;</li> <li>c) Medical treatment injury;</li> <li>d) Restricted work;</li> <li>e) Other injury/illness (not captured above), which has:               <ul style="list-style-type: none"> <li>i) Significant occupational injury/illness; or</li> <li>ii) Loss of consciousness.</li> </ul> </li> </ul> <p>The Recordable Injury Frequency Rate refers to the industry standard calculation of the number of recordable injuries multiplied by 200,000 hours then divided by the actual number of hours worked.</p>
Last-time employee injuries <ul style="list-style-type: none"> <li>total</li> <li>frequency rate</li> </ul>	17 0.6	13 0.5	19 0.7	N/A 0.9	<p>A lost-time injury is any occupational injury/illness that results in lost days beyond the date of injury as a direct result of an occupational injury/illness.</p> <p>The lost-time Injury Frequency Rate refers to the industry standard calculation of the number of lost-time injuries multiplied by 200,000 hours then divided by the actual number of hours worked.</p>
Last-time employee injury severity <ul style="list-style-type: none"> <li>total (days)</li> <li>frequency rate</li> </ul>	275 9.3	190 6.8	402 13.9	N/A 18.0	<p>The lost-time employee injury severity shows the number of calendar days lost as a result of an lost-time injury.</p> <p>The Lost-time Injury Severity Rate refers to the industry standard calculation of the number of lost days multiplied by 200,000 hours then divided by the actual number of hours worked.</p>
Out-of-scope employees receiving regular performance and career development reviews (%)	92.3	94.6	82.9	100	
Gender diversity of the Board (%) male (M) female (F)	50M/50F	50M/50F	67M/33F		
Gender diversity of the executive (%) male (M) female (F)	83M/17F	80M/20F	80M/20F		
Gender diversity of employees (%) male (M) female (F)	71M/29F	71M/29F	71M/29F		

## FINANCIAL & OPERATIONAL RESPONSIBILITY

Topic	2016-17	2017-18	2018-19	2019-20 Target	Notes
Revenue (in millions)	\$2,402	\$2,586	\$2,725	\$2,857	Economic value generated.
Operating costs (in millions)	\$1,336	\$1,340	\$1,418	\$1,472	Includes fuel & purchased power and operating, maintenance & administration costs.
Employee salaries and benefits (in millions)	\$409	\$408	\$417	\$452	These costs are included in operating costs (above).
Finance charges (in millions)	\$416	\$417	\$416	\$435	Finance charges include the net interest on long-term and short-term debt; interest on finance leases; interest on employee benefit plans; interest on provisions; interest capitalized; debt retirement fund earnings; and interest income.
Direct contributions to the Province of Saskatchewan (in millions)	\$329	\$360	\$443	\$464	Direct contributions include dividends; interest charges (also included in finance charges above); Saskatchewan capital tax; coal royalties; and water usage and evaporation charges paid to the Province of Saskatchewan.
Community investments (in millions)	\$1.4	\$1.8	\$1.7		Educational programming and community investments throughout Saskatchewan.
Saskatchewan spend (in billions)	\$1.8	\$1.7	\$1.8		Contributions to the provincial economy through the procurement of goods and services from Saskatchewan suppliers; payment of salaries, wages and benefits to employees; purchase of coal and natural gas; and acquisition of electricity from Independent Power Producers.
Indigenous procurement (%)	7.9	10.9	7.5	8.5	Calculated as Indigenous-sourced procurement relative to total Saskatchewan procurement.

## FINANCIAL INDICATORS

(in millions)	March 31 2018-19	March 31 2017-18	March 31 2016-17	March 31 2015-16	December 31 2014
Revenue	\$ 2,725	\$ 2,586	\$ 2,402	\$ 2,304	\$ 2,157
Expense	2,528	2,440	2,346	2,323	2,097
Net income (loss)	\$ 197	\$ 146	\$ 56	\$ (19)	\$ 60
Capital expenditures	\$ 833	\$ 996	\$ 886	\$ 931	\$ 1,279
Total debt	\$ 8,105	\$ 7,876	\$ 7,585	\$ 7,244	\$ 6,383
Net cash from operating activities	\$ 671	\$ 708	\$ 564	\$ 376	\$ 391
Return on equity <sup>1</sup>	7.9%	6.2%	2.5%	(0.9%)	2.8%
Per cent debt ratio <sup>2</sup>	74.1%	74.9%	75.5%	75.2%	73.1%

1. Return on equity = (net income)/(average equity), where equity = (retained earnings + equity advances).

2. Per cent debt ratio = (debt)/(debt + equity), where debt = (long-term debt + short-term advances + finance lease obligations – debt retirement funds – cash and cash equivalents) and equity = (retained earnings + equity advances).

## OPERATING STATISTICS

	March 31 2018-19	March 31 2017-18	March 31 2016-17	March 31 2015-16	December 31 2014
<b>Net electricity supplied (GWh<sup>3</sup>)</b>					
Gas	10,603	9,144	8,729	8,379	6,883
Coal	10,286	10,864	10,759	10,967	10,219
Hydro	3,591	3,873	3,525	3,213	4,706
Wind	659	765	740	682	636
Imports	490	515	478	375	797
Other	148	156	143	140	183
Gross electricity supplied	25,777	25,317	24,374	23,756	23,424
Line losses	(1,796)	(1,731)	(2,118)	(2,025)	(1,945)
Net electricity supplied	23,981	23,586	22,256	21,731	21,479
<b>Available generating capacity (net MW)</b>					
Gas	1,839	1,824	1,824	1,771	1,567
Coal	1,530	1,530	1,530	1,530	1,530
Hydro	889	889	889	889	864
Wind	241	221	221	221	198
Other	32	29	27	26	22
Total available generating capacity	4,531	4,493	4,491	4,437	4,181
<b>Peak loads (net MW)</b>					
Annual peak load	3,723	3,792	3,747	3,640	3,561
Minimum load	1,442	2,057	1,970	2,033	1,854
Summer peak load	3,524	3,470	3,270	3,331	3,131
<b>Lines in service (circuit km)</b>					
Transmission lines	14,332	14,140	14,384	13,964	13,405
Distribution lines	142,415	143,422	144,339	143,020	142,403
Total lines in service	156,747	157,562	158,723	156,984	155,808
<b>Number of permanent full-time employees</b>	3,167	3,144	3,178	3,143	3,099

3. One gigawatt hour (GWh) is equivalent to the energy consumed by 125 typical households in one year.

The Corporation was directed by provincial government to change its fiscal year-end to March 31 to coincide with that of the Province of Saskatchewan. The 2018-19, 2017-18, 2016-17 and 2015-16 information disclosed reflects SaskPower's fiscal year-end consisting of the twelve months ended March 31. The 2014 financial information disclosed reflects SaskPower's previous fiscal year-end consisting of the twelve months ended December 31.



# SYSTEM MAP

TOTAL AVAILABLE GENERATING CAPACITY FROM ALL SOURCES - 4,531 MW

As at August 2019

## HYDRO - TOTAL CAPACITY 889 MW

Athabasca Hydroelectric System

- H1A** Wellington - 5 MW
- H1B** Waterloo - 8 MW
- H1C** Charlot River - 10 MW
- H2** Island Falls Hydroelectric Station - 111 MW
- H3** Manitoba Hydro Northern Power Purchase Agreement - 25 MW
- H4** Nipawin Hydroelectric Station - 255 MW
- H5** E.B. Campbell Hydroelectric Station - 289 MW
- H6** Coteau Creek Hydroelectric Station - 186 MW

## NATURAL GAS - TOTAL CAPACITY 1,839 MW

- NG1** Meadow Lake Power Station - 44 MW
- NG2** Meridian Cogeneration Station\* - 228 MW
- NG3** North Battleford Generating Station\* - 286 MW
- NG4** Yellowhead Power Station - 138 MW
- NG5** Ermine Power Station - 92 MW
- NG6** Landis Power Station - 79 MW
- NG7** Cory Cogeneration Station - 249 MW
- NG8** Queen Elizabeth Power Station - 634 MW
- NG9** Spy Hill Generating Station\* - 89 MW
- NG10** Chinook Power Station - 350 MW<sup>1</sup>

## WIND - TOTAL CAPACITY 241 MW

- W1** Cypress Wind Power Facility - 11 MW
- W2** SunBridg Wind Power Facility\* - 11 MW
- W3** Centennial Wind Power Facility - 150 MW
- W4** Morse Wind Energy Facility\* - 23 MW
- W5** Red Lily Wind Energy Facility\* - 26 MW
- W6** Western Lily Wind Energy Facility\* - 20 MW

## COAL - TOTAL CAPACITY 1,530 MW

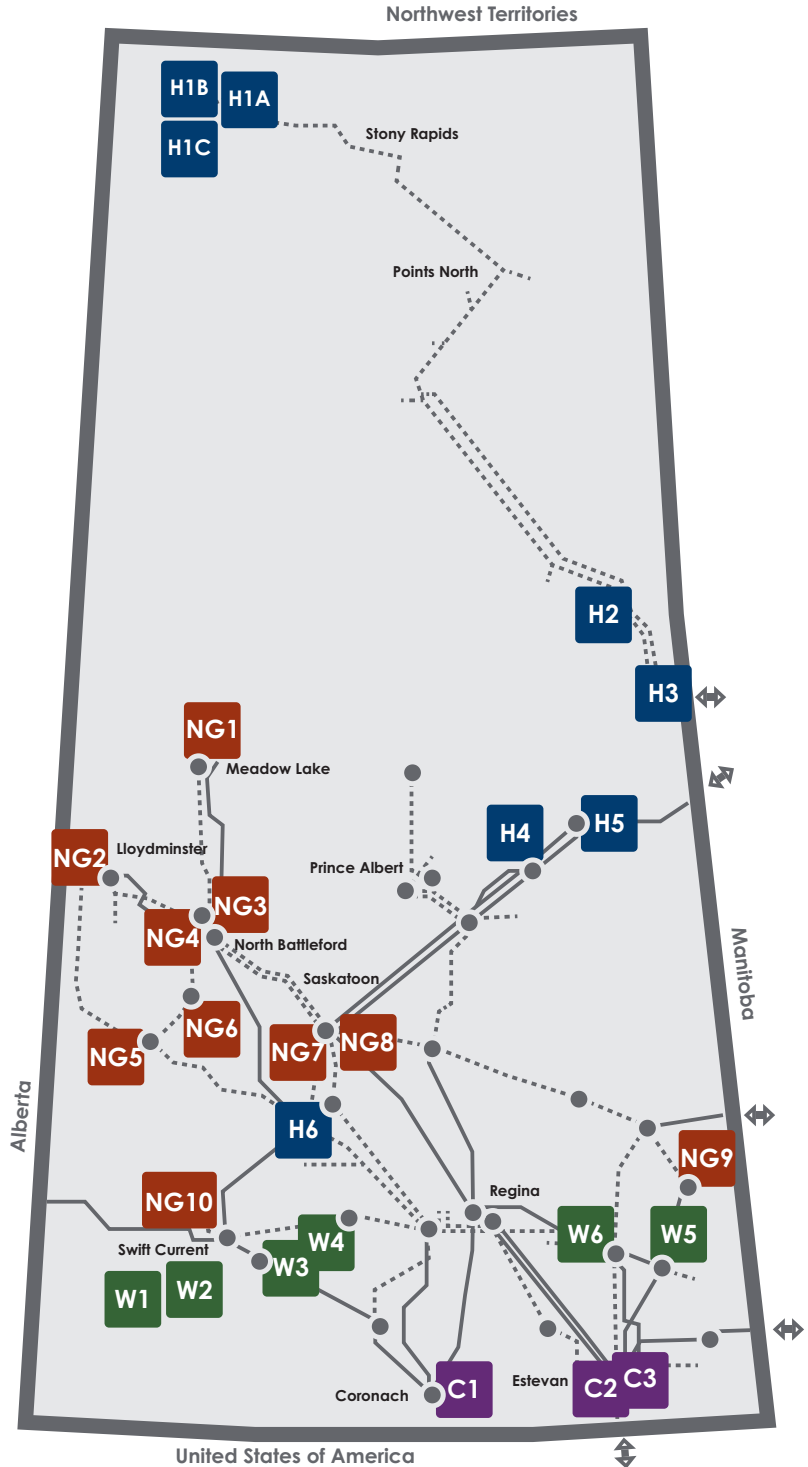
- C1** Poplar River Power Station - 582 MW
- C2** Boundary Dam Power Station - 672 MW
- C3** Shand Power Station - 276 MW

SMALL INDEPENDENT POWER PRODUCERS - TOTAL CAPACITY 32 MW (NOT SHOWN ON MAP)

\* Large Independent Power Producer

## TRANSMISSION

- 230 kV
- 138 kV/115 kV/110 kV
- Switching station
- Interconnection



1. Under construction - excluded from total natural gas capacity.



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