

## Chapter 3 Environment—Regulating Industrial Emitters

### 1.0 MAIN POINTS

Industry-driven greenhouse gas emissions contribute to climate change. Climate instability impacts the environment, human health, and the economy. For example, Saskatchewan has experienced more prolonged droughts, wildfires, and extreme temperatures in recent years.

In 2019, the Ministry of Environment began operating an Output-Based Performance Standards Program designed to regulate industrial emitters to reduce greenhouse gas emissions per unit of production (called emissions intensity). Emitters who join the Program are exempt from the Federal carbon pricing system. Regulated industrial emitters, such as from the oil and gas, potash and steel industries, accounted for about 16% of Saskatchewan's total greenhouse gas emissions in 2021. The Program has grown from 80 industrial emitters in 2019 to 154 in 2023.

The Program intends to help maintain industrial sector economic competitiveness while also reducing greenhouse gas emissions intensity. Under the Program, industrial emitters exceeding annual facility-specific emissions intensity limits must pay a levy to the Ministry intended to fund technologies to reduce emissions intensities.<sup>1</sup> Nearly half of regulated emitters exceeded their permitted limit for 2019 and 2020.

We audited the Ministry's processes to regulate industrial emitters to reduce greenhouse gas emissions intensity. We found the Ministry had effective processes, except it needs to:

- Determine and use sufficient measures to publicly report on the effectiveness of the Program

The Ministry does not have sufficient measures focused on assessing whether the Program is achieving the desired environmental and economic results (e.g., reducing emissions intensity, saving industrial emitters money). Public reporting on measures helps the public hold the Government accountable for achieving the expected benefits and supports ongoing assessment to help improve the effectiveness of carbon levy programs.

- Implement a robust data management system to improve analysis and decrease the risk of information errors or inaccuracies. Poor data management systems reduce the Ministry's ability to assess the Program's results.
- Document staff guidance for consistently evaluating concerns identified in third-party verifier reports about industrial emitter returns. This will help ensure the Ministry receives reliable emitter information and collects all levies owed.

<sup>1</sup> The Ministry collected \$29 million from industrial emitter levies in 2022–23 and forecasts \$121.3 million from these same emitters for 2023–24.



## 2.0 INTRODUCTION

The Ministry of Environment is responsible for managing and protecting Saskatchewan's environment for the wellbeing of the province and its people.<sup>2</sup> In 2022–23, the Ministry spent \$4.4 million on climate change related initiatives such as the development and administration of regulatory programs (2021–22: \$4.5 million).<sup>3</sup> It planned to spend \$5 million on climate change related initiatives in 2023–24.<sup>4</sup>

The Ministry manages several initiatives within the Government of Saskatchewan's climate change strategy. One of these initiatives is an Output-Based Performance Standards Program that began in 2019 to regulate industrial emitters to reduce greenhouse gas emissions intensity. Emissions intensity is greenhouse gas emissions relative to production for an emitter's industrial facility.

At December 2023, the Ministry had 17 staff who work on the Output-Based Performance Standards Program.

### 2.1 Greenhouse Gas Emissions Cause Climate Change

Greenhouse gas emissions are the current primary cause of climate change because, once released, these gases warm the earth by trapping solar radiation.<sup>5</sup> Some human activity (such as manufacturing, agriculture, or use of fossil fuels) creates greenhouse gas emissions, thereby increasing the risk of global climate change.<sup>6</sup>

Climate change poses significant threats to environmental sustainability, economic growth, biodiversity, human health, infrastructure, and water resource management. Climate change can be caused by natural processes (sun, atmosphere-ocean-land systems), as well as from human activity.<sup>7</sup>

Climate change is a long-term shift in the average weather conditions of a region, such as its typical temperature, rainfall, and windiness. It means that the range of conditions expected in many regions will change over the coming decades, including changes in extreme conditions.

The average global temperature has increased about 1.1° Celsius since 1880 with most of this warming occurring since 1975.<sup>8</sup> The 2023 calendar year was the warmest year on record globally, with the seven months from June to December all breaking temperature records.<sup>9</sup>

The prairies have one of the most variable climates in Canada with typically hot and dry summers and cold winters. Climate change affects weather, such as increasing the number or intensity of heat waves, wildfires, intense storms, torrential rains, and droughts.<sup>10</sup>

<sup>2</sup> Ministry of Environment, *Business Plan 2023–24*, p. 3.

<sup>3</sup> Ministry of Environment, *2022–23 Annual Report*, p. 11.

<sup>4</sup> Ministry of Environment, *Business Plan 2023–24*, p. 9.

<sup>5</sup> International Panel on Climate Change, *Climate Change 2023 Synthesis Report*, p. 4.

<sup>6</sup> [canada.ca/en/environment-climate-change/services/environmental-indicators/greenhouse-gas-emissions.html](https://canada.ca/en/environment-climate-change/services/environmental-indicators/greenhouse-gas-emissions.html) (14 February 2024).

<sup>7</sup> [canada.ca/en/environment-climate-change/services/climate-change/canadian-centre-climate-services/basics/concepts.html](https://canada.ca/en/environment-climate-change/services/climate-change/canadian-centre-climate-services/basics/concepts.html) (4 March 2024).

<sup>8</sup> [earthobservatory.nasa.gov/world-of-change/global-temperatures](https://earthobservatory.nasa.gov/world-of-change/global-temperatures) (14 February 2024).

<sup>9</sup> [climate.copernicus.eu/warmest-december-concludes-warmest-year-record](https://climate.copernicus.eu/warmest-december-concludes-warmest-year-record) (4 March 2024).

<sup>10</sup> Ministry of Environment, *2023 State of the Environment Report*, p. 19.

Globally, governments have been working for many years to develop and implement achievable strategies aimed at managing climate change and the resulting impacts. Jurisdictions with effective climate change strategies will help prepare their economies for increasing global competition as customers seek out lower carbon options.

## 2.2 Saskatchewan's Output-Based Performance Standards Program

Saskatchewan created an Output-Based Performance Standards (OPBS) Program within its climate change strategy in response to the Federal Government's national carbon pricing system that started in 2019.

The national carbon pricing system has two parts: a regulatory charge on fossil fuels like gasoline and natural gas (fuel charge) and a performance-based system for emitting industries (output-based pricing system). Provinces and territories can request Federal Government approval to run their own programs or let one or both parts of the Federal pricing system apply.<sup>11</sup>

Under an output-based pricing system, emitters pay a price if they produce more greenhouse gas emissions (carbon dioxide and equivalents such as methane and nitrous oxide) than permitted by the pricing system. The Federal pricing system uses national emissions data to determine permitted emissions intensity benchmarks for various industry sectors. The system tightens each respective sector benchmark annually by defined increments up to 20% by 2030. The system expects to encourage innovation while maintaining competitiveness and protecting against 'carbon leakage' (i.e., risk emitters move operations from one country to another to avoid paying a price on emissions, which may lead to higher global emissions).<sup>12</sup>

Under approved jurisdictional programs, provinces and territories can use jurisdictional emissions data as the basis for determining permitted emissions intensity benchmarks for emitters rather than national emissions data. Appropriate permitted emissions intensity benchmarks can help protect provincial economies by keeping pricing systems affordable to emitters (e.g., avoid bankruptcy), and may help to protect the environment by preventing carbon leakage that could increase global emissions.

In 2018, the Federal Government approved the Government of Saskatchewan's Output-Based Performance Standards (OBPS) Program to begin January 1, 2019. The Ministry of Environment became responsible for the OBPS Program under *The Management and Reduction of Greenhouse Gases Act* (Saskatchewan). The Federal Government intends to periodically review Saskatchewan's Program to confirm alignment with the Federal guidelines.

The approved Program allows the Government of Saskatchewan to determine sectors eligible to register in its Program and the greenhouse gas emissions thresholds that require emitters to join the Program (e.g., 25,000 tonnes of carbon dioxide equivalent emitted annually).<sup>13,14</sup> The Government also sets the emissions intensity reduction requirements

<sup>11</sup> [canada.ca/en/environment-climate-change/services/climate-change/pricing-pollution-how-it-will-work.html](https://canada.ca/en/environment-climate-change/services/climate-change/pricing-pollution-how-it-will-work.html) (26 March 2024).

<sup>12</sup> [canada.ca/en/environment-climate-change/services/climate-change/pricing-pollution-how-it-will-work/output-based-pricing-system.html](https://canada.ca/en/environment-climate-change/services/climate-change/pricing-pollution-how-it-will-work/output-based-pricing-system.html) (27 February 2024).

<sup>13</sup> Emitters with lower thresholds may voluntarily opt into the Program.

<sup>14</sup> Saskatchewan's OBPS Program includes five additional sectors than the Federal pricing system: chemical manufacturing, wood product manufacturing, mineral product manufacturing, agricultural and industrial equipment manufacturing, and food and beverage processing.

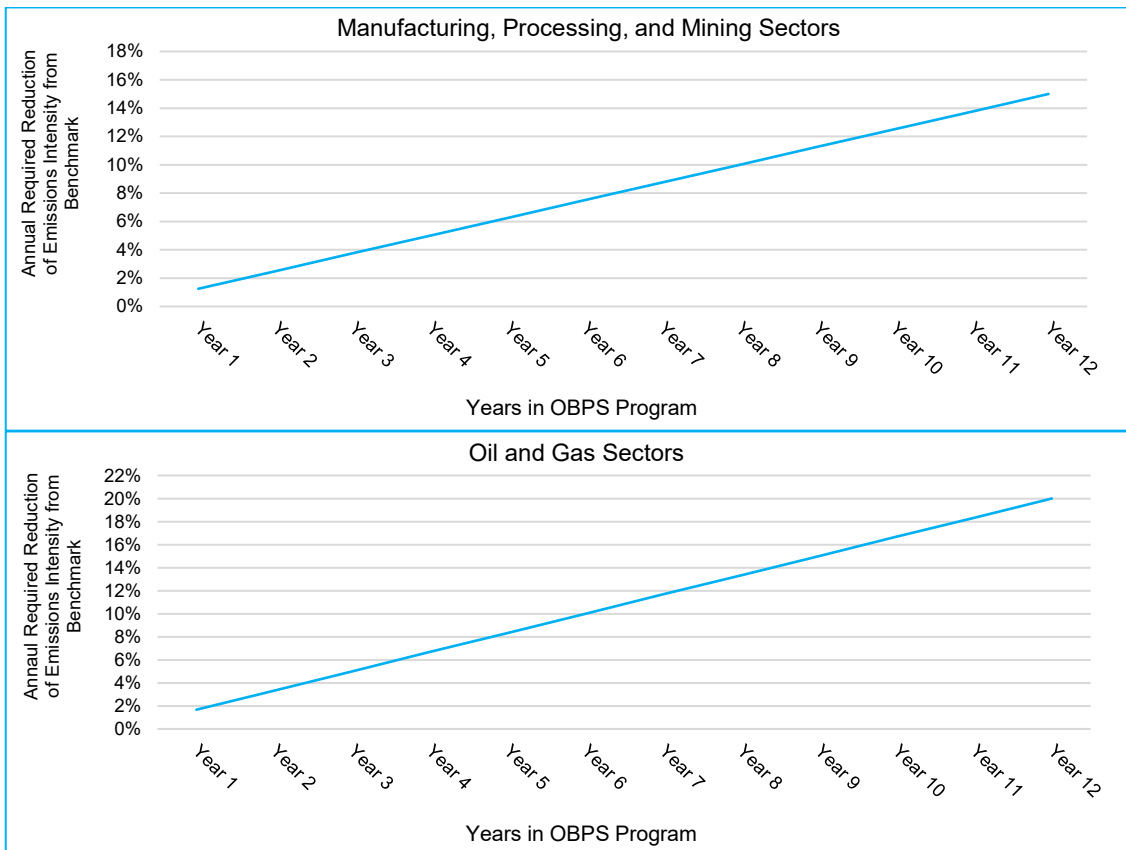


emitters must meet each year, or consequently pay levies if they do not achieve expected reductions. Emitters are exempt from the Federal Program, including the fuel charge component, once registered in Saskatchewan’s OBPS Program. Also, similar to other Canadian jurisdictions with their own programs, Saskatchewan’s Program allows more gradual reductions of emissions intensity, resulting in lower levies until 2030. The Ministry estimates Saskatchewan’s OBPS Program will save regulated industrial emitters about \$3.7 billion compared to the Federal Program by 2030.<sup>15</sup>

Under Saskatchewan’s OBPS Program, regulated industrial emitters who reduce their emissions intensity below an annual facility-specific limit will earn performance credits that can be sold or saved for future use. Regulated industrial emitters who exceed their facility-specific limits must either use credits or make a payment (i.e., pay a levy) to the Ministry. These levies may then be used to fund technologies that reduce greenhouse gas emissions intensity at regulated industrial facilities (i.e., through the Ministry’s Saskatchewan Technology Fund).<sup>16</sup>

**Figure 1** shows the cumulative emissions intensity reduction requirements for Saskatchewan’s OBPS Program from Year 1 to Year 12 from when an industrial emitter enters the Program. For example, under the Program, the upstream oil and gas sector will have to annually reduce emissions intensity by 1.67% or pay a levy.

**Figure 1—Saskatchewan Cumulative Emissions Intensity Reduction Requirements**



Source: Adapted from *The Management and Reduction of Greenhouse Gases (Standards and Compliance) Regulations, 2023*, Table 1.

<sup>15</sup> Ministry of Environment, *2022–23 Annual Report*, p. 4.

<sup>16</sup> The Saskatchewan Technology Fund administers non-repayable grants to regulated industrial emitters to support projects to reduce greenhouse gas emissions intensity. The Fund began receiving grant applications in September 2023.

**Figure 2** indicates about 16% of total greenhouse gas emissions in Saskatchewan are from sectors the Ministry regulated through the OBPS Program and that we focused our audit on (shaded in **Figure 2**). The Ministry became responsible for regulating the electricity sector in 2023, but the Ministry did not receive any reporting from these emitters by December 31, 2023, and, as a result, our audit did not include this sector. In 2023–24, the Ministry forecasts revenue of \$447.6 million from OBPS Program levies, of which \$326.3 million relates to the electricity sector.<sup>17</sup>

**Figure 2—2021 Greenhouse Gas Emissions by Sector and under Ministry Regulation<sup>A</sup>**

| Economic Sector                             | % of Total 2021 Provincial GHG Emissions <sup>B</sup> | Regulated by Ministry's OBPS Program | % of 2021 GHG Emissions included in Ministry's OBPS Program |
|---|---|--------------------------------------|---|
| <b>Oil and Gas</b>                          | <b>25%</b>  | <b>Yes</b>                           | <b>10%</b>  |
| Agriculture                                 | 24%   | No                                   | 0%  |
| <b>Electricity<sup>C</sup></b>              | <b>23%</b>  | <b>Yes</b>                           | <b>0%</b>   |
| Transportation                              | 14%   | No                                   | 0%  |
| <b>Heavy Industry (e.g., potash, steel)</b> | <b>6%</b>   | <b>Yes</b>                           | <b>6%</b>   |
| Buildings                                   | 6%  | No                                   | 0%  |
| Waste and Others                            | 3%  | No                                   | 0%  |

Source: Government of Saskatchewan's 2023 *State of the Environment Report*, p. 19, and adapted from information provided by the Ministry of Environment.

<sup>A</sup> 2021 data used because 2022 data was not yet available.

<sup>B</sup> GHG means greenhouse gas.

<sup>C</sup> Effective January 1, 2023, the Ministry also became responsible for regulating the electricity sector, which will account for another 23% of the province's emissions. Our audit did not include the electricity sector because no reporting was required by December 31, 2023.

## 2.3 Importance of Regulating Industrial Emitters

Regulating industrial emitters through its Output-Based Performance Standards Program helps the Ministry of Environment to monitor greenhouse gas emissions intensity.

Reducing greenhouse gas emissions intensity will help Saskatchewan minimize negative impacts to provincial economic growth and environmental sustainability caused by climate change. Much of the economy relies on the environment, including agriculture, forestry, tourism, and other resource-based industries (e.g., mining, oil and gas). The success of these industries, and the province, depends on a stable climate to do such things as grow food and have healthy forests.<sup>18</sup>

Without effective processes to regulate industrial emitters, Saskatchewan may not achieve reductions in greenhouse gas emissions intensity as expected to protect the environment and economy. Having appropriate processes to collect, analyze, and report accurate and complete emissions intensity data helps the Ministry support the Government of Saskatchewan's climate change strategy, as well as contributes to national efforts to achieve net-zero emissions by 2050.<sup>19</sup>

<sup>17</sup> Government of Saskatchewan, 2024–25 *Saskatchewan Budget*, pp. 47 and 48.

<sup>18</sup> [www.saskatchewan.ca/residents/environment-public-health-and-safety/saskatchewan-state-of-the-environment-2023/greenhouse-gas-emissions](http://www.saskatchewan.ca/residents/environment-public-health-and-safety/saskatchewan-state-of-the-environment-2023/greenhouse-gas-emissions) (16 October 2023).

<sup>19</sup> Net-zero emissions means the economy either emits no greenhouse gas emissions or offsets its emissions. [www.canada.ca/en/services/environment/weather/climatechange/climate-plan/net-zero-emissions-2050.html](http://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/net-zero-emissions-2050.html) (19 March 2024).



## 3.0 AUDIT CONCLUSION

We concluded for the period ended December 31, 2023, the Ministry of Environment had effective processes, except in the following areas, to regulate industrial emitters to reduce greenhouse gas emissions intensity.

The Ministry needs to:

- Use sufficient measures to publicly report on the effectiveness of its Output-Based Performance Standards Program
- Implement a robust data management system to efficiently track and analyze reported emissions intensity data
- Document staff guidance for consistently evaluating concerns identified in third-party verifier reports about industrial emitter returns

Figure 3—Audit Objective, Criteria, and Approach

**Audit Objective:**

Assess the effectiveness of the Ministry of Environment's processes, for the period ending December 31, 2023, to regulate industrial emitters to reduce greenhouse gas emissions intensity.

The audit did not examine the Ministry's processes to fund technologies that mitigate, sequester, or capture greenhouse gas emissions at industrial facilities as the Ministry did not approve any funding applications by December 31, 2023 (i.e., from the Ministry's Saskatchewan Technology Fund).

**Audit Criteria:**

Processes to:

1. **Set appropriate requirements for regulating industrial emitters**
  - Clearly outline emissions intensity limits and reporting policies to emitters (e.g., compliance return, training, communication to emitters)
  - Register emitters for regulation (e.g., required and voluntary registrations)
  - Establish baseline emissions intensity for industrial facilities to enable measuring reductions in emissions intensities
2. **Monitor regulated industrial emitters' compliance with emissions intensity requirements**
  - Analyze regulated industrial facilities' data on emissions intensity (e.g., completeness of compliance return, adequate verification, trend analysis, use qualified staff)
  - Assess industrial facilities' emissions intensity against annual limits (e.g., determine whether limits met and any levies)
  - Accurately track and value performance credits (e.g., earned, retired, sold)
  - Take action to resolve non-compliance in industrial facilities' reporting (e.g., warnings, penalties)
3. **Report emissions intensity results**
  - Analyze provincial emissions intensity against expectations (e.g., trend, impact on emissions and economy)
  - Recommend changes to achieve results (e.g., adjust limits, adjust eligibility requirements)
  - Provide emissions intensity results to senior management and the public

**Audit Approach:**

To conduct this audit, we followed the standards for assurance engagements published in the *CPA Canada Handbook—Assurance* (CSAE 3001). To evaluate the Ministry of Environment's processes, we used the above criteria based on our related work, reviews of literature including reports of other auditors, and consultations with management. Ministry management agreed with the above criteria.

We examined the Ministry's policies and procedures relating to regulating industrial emitters to reduce greenhouse gas emissions intensity. We interviewed key staff responsible for administering the Program. We assessed the Ministry's processes for providing guidance to facilities for various submissions required under the Program. We tested a sample to determine whether emitters provided the required information, Ministry staff reviewed the information and provided appropriate approval, and levies were in accordance with rates outlined in legislation. We assessed the Ministry's measures and reports to senior management and the public on regulating industrial emitters. We used an external consultant with expertise in the area to help us identify good practice and to assess the Ministry's processes.

## 4.0 KEY FINDINGS AND RECOMMENDATIONS

### 4.1 Sufficient Measures Needed to Assess Program Effectiveness

While the Ministry of Environment had two measures to monitor emitter participation levels in its Output-Based Performance Standards (OBPS) Program, it needs further measures to assess whether the Program is resulting in the economic and environmental benefits expected, including identifying key measures to use for public reporting.

The Government of Saskatchewan did not formally set out the objectives of its OBPS Program. However, based on its public communications about the Program, objectives include:

- Maintaining economic competitiveness by reducing the amount industrial emitters pay for carbon pricing (e.g., fuel charge)
- Protecting against carbon leakage that can increase global greenhouse gas emissions (industry moving production and jobs to other countries with less stringent climate policies, meaning increases in global emissions and decreases in Saskatchewan exports)<sup>20</sup>

The Ministry had two measures specific to the OBPS Program at December 2023, as shown in **Figure 4**. Both measures focus on Program participation, as reflected by the quantity and the size of industrial emitter facilities registered in the Program. These measures are output focused (e.g., levels of activity) rather than achievement oriented (e.g., reducing emissions intensity), which do not support effective assessment of the Program. In addition, these measures lacked adequate targets (e.g., did not quantify increases expected). The Ministry plans to report on the status of these measures in its 2023–24 annual report.

**Figure 4—Ministry of Environment’s Measures Specific to the OBPS Program**

| Desired Result  | Measure   | Target   | Actual Results  |
|---|---|--|---|
| Increased number of facilities in Saskatchewan taking part in emissions intensity reduction program | Number of facilities registered in the OBPS Program             | Increase the number of facilities covered under the OBPS Program           | See <b>Figure 7</b> – number of facilities increased by 74 since 2019 |
| Increased amount of emissions in Saskatchewan covered by the emissions intensity reduction program  | Amount of Saskatchewan emissions covered under the OBPS Program | Increase the amount of provincial emissions covered under the OBPS Program | See <b>Figure 2</b> – electricity sector added in 2023                |

Source: Adapted from Ministry of Environment, *Business Plan 2023–24*, p. 5. Results column added by Provincial Auditor Saskatchewan.

Management advised us the Ministry is considering future measures such as percentage of emitters who pay required levies timely.

<sup>20</sup> [saskatchewan.ca/government/news-and-media/2022/january/19/saskatchewan-expands-obps-to-protect-additional-sectors-from-the-federally-imposed-carbon-tax](https://saskatchewan.ca/government/news-and-media/2022/january/19/saskatchewan-expands-obps-to-protect-additional-sectors-from-the-federally-imposed-carbon-tax) (26 March 2024).



In July 2021, the Federal Government provided the Ministry with a list of public reporting requirements for its OBPS Program (e.g., total emissions from facilities and sectors covered by the OBPS Program, total OBPS levies issued and paid). The Federal Government did not set or require targets for these measures; the Ministry did not set its own targets for these measures. These measures could potentially be used to better inform the public whether the Ministry is delivering the Program’s intended economic and environmental outcomes. The Ministry had not reported on these measures at December 31, 2023, and is not required to report until 2025.

**Figure 5** provides some examples of potential performance measures the Ministry could consider to effectively assess the OBPS Program.

**Figure 5—Examples of Other Performance Measures to Assess OBPS Program**

| Other Performance Measure Examples   | Potential Economic Outcomes   | Potential Environmental Outcomes  |
|--|---|---|
| Total levies issued and paid to the Ministry’s Saskatchewan Technology Fund                        | Reduced levies due to environmental improvements by industrial emitters   | Decreases in emissions intensity due to environmental improvements by industrial emitters |
| Greenhouse gas emissions intensity under the OBPS Program per unit of gross domestic product (GDP) | Size of the industrial economy (GDP) increases at a faster rate than emissions intensity due to producing less emissions-intensive products |   |
| Industrial emitter pricing system savings resulting from the OBPS Program                          | Savings from fuel charge exemption resulting in increased size of the industrial economy (GDP)  | None  |
| Changes in regulated emitters’ emissions intensity   | Decreases in emissions intensity lead to invested savings that increase the size of the industrial economy (GDP)                            | Decreases in emissions intensity due to environmental improvements by industrial emitters |

Source: Developed by the Office of the Provincial Auditor of Saskatchewan.

Without sufficient measures, the Ministry cannot effectively assess and publicly report on the performance of the OBPS Program toward economic and environmental goals of the Government, and report on what is important to the public.

- 1. We recommend the Ministry of Environment use sufficient measures to publicly report on the effectiveness of its Output-Based Performance Standards Program.**

## 4.2 More Robust Data Management System Needed

The Ministry of Environment needs to complete development of its IT data management system to support robust and efficient analysis and reporting. Manual processes to track greenhouse gas emissions reported by industrial emitters can result in inefficiency and data inaccuracies.

We found the Ministry manually input limited data in a spreadsheet, such as the total emissions of emitters registered in the Output-Based Performance Standards (OBPS) Program. For example, it did not track emissions and units produced by product type (e.g., iron and steel). This process did not efficiently support detailed trend analysis and increased the risks of manual input errors or unauthorized changes to data.



More extensive data analysis can help to identify potential errors or fraud. While we did not identify any input errors or fraud during our testing, using a more sophisticated data management system can help the Ministry identify data inaccuracies and improve analysis to identify potential issues. We note while fraud may be rare, it can occur as illustrated by a case in 2023 where the Alberta government criminally charged a private company for falsifying emissions data for Alberta's regulated emitters program.<sup>21</sup>

Poor data management processes reduce the Ministry's ability to assess the Program's results. We could not reasonably complete detailed analysis of total emissions intensity of emitters in the Program since the Ministry did not have a robust process to track all relevant data. For example, we could not readily assess whether industrial emitters' emissions intensities collectively are trending down or up. Sufficient, quality data systems will also support robust analysis for reporting against performance measures once defined by the Ministry, as described in **Section 4.1**.

In addition, we found the Ministry combined actual and baseline data in its spreadsheet used to track actual emissions for a year. The Ministry used baseline data as a proxy where actual results were not available. Such estimation methods do not provide accurate provincial emissions data for emitters; clear explanations will need to be provided for these data inconsistencies to support effective decision-making.

At December 2023, the Ministry was developing an IT system to allow efficient tracking of all information collected from emitters, which will support more robust analysis and reporting. Allowing direct entry of required information by emitters through online forms may also increase efficiency for both emitters and the Ministry, as well as reduce the risk of data entry errors.

Without an adequate data management system, the Ministry cannot efficiently obtain, track, and analyze greenhouse gas emissions data reported by industrial emitters to determine whether the OBPS Program is achieving the desired results.

2. We recommend the Ministry of Environment implement a robust data management system to efficiently obtain, track, and analyze sufficient greenhouse gas emissions data reported by industrial emitters.

### 4.3 Clear Requirements Conveyed to Register Emitter Facilities

The Ministry of Environment provided clear requirements to staff and emitters for registering facilities in the Output-Based Performance Standards (OBPS) Program, such as standardized registration forms and checklists.

The Ministry required each emitter in the regulated sectors (see **Figure 2**) to register each of its industrial facilities exceeding annual emissions of 25,000 tonnes of carbon dioxide equivalents (CO<sub>2</sub>e).<sup>22</sup> See **Figure 6** for similar registration requirements in other Canadian jurisdictions compared to Saskatchewan. In Saskatchewan, any industrial facility within the regulated sectors may also voluntarily register with the Ministry to become a regulated

<sup>21</sup> [www.westernstandard.news/alberta/alberta-government-charges-company-with-falsely-reporting-emissions/article\\_0dfc8320-2290-11ee-bf2a-b31729be6995.html](https://www.westernstandard.news/alberta/alberta-government-charges-company-with-falsely-reporting-emissions/article_0dfc8320-2290-11ee-bf2a-b31729be6995.html) (11 October 2023).

<sup>22</sup> 25,000 tonnes of CO<sub>2</sub>e is the equivalent of driving about 5,500 gasoline-powered passenger vehicles for one year. [www.epa.gov/energy/greenhouse-gas-equivalencies-calculator#results](https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator#results) (27 February 2024).



industrial facility. For example, a facility may want to register with the Ministry to obtain a carbon pricing exemption certificate to reduce costs from the fuel charge incurred under the Federal carbon pricing system.

**Figure 6—Registration Requirements for OBPS Programs**

| Jurisdiction              | Mandatory Registration Requirement in tonnes of CO <sub>2</sub> e | Voluntary Registration Requirement in tonnes of CO <sub>2</sub> e |
|---------------------------|---|---|
| Alberta                   | > 100,000   | > 2,000 <sup>B</sup>  |
| Canada <sup>A</sup>       | > 50,000  | > 10,000  |
| New Brunswick             | > 50,000  | > 10,000  |
| Ontario                   | > 50,000  | >10,000   |
| Saskatchewan              | > 25,000  | > 0   |
| Newfoundland and Labrador | > 25,000  | > 15,000  |
| British Columbia          | > 10,000  | > 0   |

Source: Developed by the Office of the Provincial Auditor of Saskatchewan.

<sup>A</sup> Provinces and territories that do not have their own OBPS program are included in Canada's pricing system.

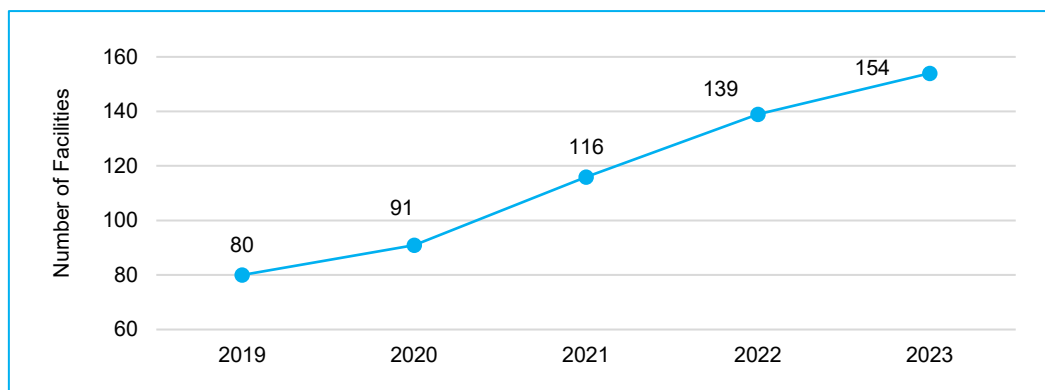
<sup>B</sup> Unless the emitter has already registered a facility in the same sector, in which case the requirement is 0 tonnes of CO<sub>2</sub>e.

The Ministry periodically checks a Federal listing of all facilities in Canada that produce at least 10,000 tonnes of CO<sub>2</sub>e to ensure required industrial facilities in Saskatchewan are registered. We analyzed the Federal listing and found all Saskatchewan facilities that produce at least 25,000 tonnes of CO<sub>2</sub>e were registered in Saskatchewan's OBPS Program.

The Ministry also allowed voluntary registration into the Program for aggregate facilities—individual facilities producing less than 25,000 tonnes of CO<sub>2</sub>e operated by an emitter grouped together.<sup>23</sup> All aggregate facilities are upstream oil and gas companies involved with the production of oil and gas.

As shown in **Figure 7**, at December 2023, the Ministry regulated 100 emitters who operate 154 facilities (58 industrial facilities mandatorily registered in the OBPS Program; the rest voluntarily registered). The number of facilities registered has almost doubled since 2019.

**Figure 7—Number of Registered Facilities in Saskatchewan's OBPS Program, by Year**



Source: Adapted from information provided by the Ministry of Environment.

<sup>23</sup> An aggregate facility consists of a collection of two or more individual facilities of the same operator, including all the operator's individual and industrial facilities with total regulated emissions less than 25,000 tonnes of CO<sub>2</sub>e. It does not include any industrial facility with emissions greater than 25,000 tonnes of CO<sub>2</sub>e. Source: Government of Saskatchewan, *The Aggregate Facility Standard*, p. 15.

In 2023, the Ministry registered 17 new facilities in the Program.<sup>24</sup> About 75% of these emitters registered voluntarily.

*The Management and Reduction of Greenhouse Gases (Standards & Compliance) Regulations, 2023*, and the Ministry's facility standards outline the registration requirements for facilities. The Ministry's registration requirements expect an emitter to submit a registration form and a signed declaration from an authorized signing officer (i.e., person legally responsible for information provided), and may request additional information such as a map showing the location of each individual facility.

Once the Ministry receives a request to register from an emitter, it provides a registration application package to eligible emitters. We found the Ministry's registration form included all expected information requirements and was consistent with legislation and other Canadian jurisdictions.

Two Ministry staff (i.e., a primary and a secondary reviewer) review the registration application using a checklist that sets out expected steps (e.g., check completeness, first production date, appropriate signing authority). The checklist includes all the information the Ministry expects to receive with the registration application.

If no issues occur during the registration review, the Ministry provides the facility a registration approval letter. The Ministry also sends the letter to Environment and Climate Change Canada (ECCC) to inform the Federal Government of the facility's approval into the Saskatchewan OBPS Program.

For 16 registrations (from 2019 to 2023) tested, we found:

- Appropriate Ministry staff completed the reviews, including completing the registration review checklists
- Emitters provided required registration information
- The Director of Emissions Management and Compliance signed the facility registration approval letters and communicated approvals into the Program timely to the emitter and ECCC (i.e., within a month of Ministry staff finalizing review of a completed registration package)

Providing standardized registration forms and checklists for staff supports consistent and appropriate review of emitter registration applications.

#### 4.4 Guidance Provided to Complete Returns, But Remittance Time Lengthy

The Ministry of Environment maintains reasonable guidance about various returns it requires from regulated emitters to support their compliance with Output-Based Performance Standards (OBPS) Program requirements. However, we suggest the Ministry reassess how long it gives emitters to submit payments when they exceed their facility-specific emissions intensity limits (i.e., have excess emissions).

<sup>24</sup> In 2023, two facilities left the Saskatchewan OBPS Program.



The Ministry provides guidance and templates on its website to emitters to use to meet emissions intensity reporting requirements.<sup>25</sup> The guidance and return templates promote consistency of information received from emitters to support efficient review by Ministry staff. We found the Ministry's guidance adequate and consistent with legislation. The guidance is also clear when the emissions information is due to the Ministry. The Federal Government approved these deadlines as part of the Program.

**Figure 8** outlines the baseline, emissions and compliance returns the Ministry requires from emitters.

**Figure 8—Types of Returns Required from Emitters**

| Type<br>(Frequency)   | Description  | Deadline   | Example – New Industrial Facility<br>Registered March 31, 2021                                  |   |
|---|--|--|---|---|
|   |  |  | Due Date  | Ministry Review   |
| <b>Baseline Return</b><br>(One-time unless operations change) | Used to determine annual permitted emissions intensity which reduces over time – see <b>Figure 1</b>   | <u>New facility</u> : <sup>A</sup><br><b>June 1 following 2 years of operation</b> | <b>June 1, 2024</b>   | Registration review – <b>April 30, 2021</b><br>Baseline Return review – <b>June 1, 2025</b>     |
| <b>Emissions Return</b><br>(Annual)                           | Reports actual emissions intensity to determine whether emitter exceeded the annual permitted emissions intensity for the year<br><br>Performance credits are earned where actual emissions intensity is below the annual permitted amount | <b>June 1 following the compliance year</b>  | <b>June 1, 2025</b> for 2024 emissions;<br><b>June 1, 2026</b> for 2025 emissions;<br>and so on | <b>October 31, 2026</b> for 2024 emissions;<br>October 31, 2027 for 2025 emissions; and so on   |
| <b>Compliance Return</b><br>(Annual) <sup>B</sup>             | Submitted by emitter for all its regulated facilities (i.e., one combined compliance return) if it has a levy (actual emissions intensity exceeded the annual permitted amount), along with any required payment                           | <b>October 31 following the year in which the emissions return is submitted</b>    | <b>October 31, 2026</b> for 2024 emissions;<br>October 31, 2027 for 2025; and so on             | <b>November 30, 2026</b> for 2024 emissions;<br>November 30, 2027 for 2025 emissions; and so on |

Source: Adapted from information provided by the Ministry of Environment.

<sup>A</sup> A new facility is one that had no operations prior to 2019; its baseline used an average of two years of actual emissions following registration. A new facility registers with the OBPS Program when it begins operations. An existing facility was required to submit its baseline return six months after registration was approved.

<sup>B</sup> Prior to the 2023 compliance year, emitters could provide a two-year combined compliance return (e.g., 2019 and 2020 reported together).

The Ministry gives emitters extensive time to file their compliance returns and pay any levies after filing their actual emissions intensity (emissions return) for a year, as shown in **Figure 8**. For example, for the 2024 compliance year, the Ministry requires actual emissions intensity information that indicates whether emitters met their permitted emissions intensity for each facility to be submitted by June 1, 2025. However, if emitters exceed the permitted emissions intensity, they do not have to file their compliance returns and pay the Ministry until October 31, 2026. This is about 1.5 years after emitters determine they exceeded their limits.

<sup>25</sup> [www.saskatchewan.ca/business/environmental-protection-and-sustainability/a-made-in-saskatchewan-climate-change-strategy/guidance-for-emitters](http://www.saskatchewan.ca/business/environmental-protection-and-sustainability/a-made-in-saskatchewan-climate-change-strategy/guidance-for-emitters) (28 February 2024).

We found other Canadian jurisdictions set earlier compliance return deadlines for their OBPS programs (see **Figure 9**).

**Figure 9—Canadian Jurisdiction Compliance Return Deadlines**

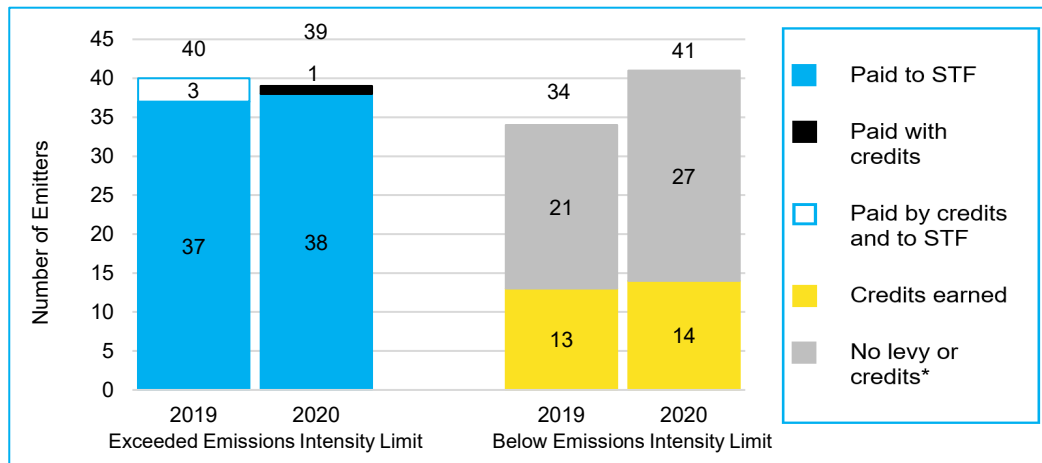
| Jurisdiction | Deadline   | Example for 2023 compliance year |
|--------------|--|----------------------------------|
| Alberta      | June 30<br>(half a year after compliance year)         | June 30, 2024                    |
| Canada       | December 15<br>(year after compliance year)            | December 15, 2024                |
| Ontario      | December 15<br>(year after compliance year)            | December 15, 2024                |
| Saskatchewan | October 31<br>(almost two years after compliance year) | October 31, 2025                 |

Source: Developed by the Office of the Provincial Auditor of Saskatchewan.

While longer timeframes may be reasonable during the implementation phase of the OBPS Program, the Ministry should reassess these timeframes as the Program matures. Earlier payment of levies supports timely consequences for not meeting permitted emissions intensity, as well as supporting earlier funding of technologies that reduce greenhouse gas emissions through the Ministry’s Saskatchewan Technology Fund. In 2022–23, regulated industrial emitters paid levies of \$29 million for the 2019 and 2020 compliance years, and owed an additional \$0.2 million.<sup>26</sup> If levies are not paid in a timely manner, the amount owing to the Technology Fund may be at risk of non-payment in the event emitters cease operations.

**Figure 10** outlines compliance results for returns received for 2019 and 2020 compliance years. About half of these emitters exceeded their permitted emissions intensity and were required to pay a levy (2019: 40 emitters; 2020: 39 emitters).

**Figure 10—Summary of Compliance Return Results Received for 2019 and 2020**



Source: Developed by the Office of the Provincial Auditor of Saskatchewan.

STF – Saskatchewan Technology Fund

\* Data is incomplete because the Ministry does not require emitters to submit a compliance return if they do not owe a levy.

<sup>26</sup> Ministry of Environment, *Saskatchewan Technology Fund Annual Report 2022–23*, p. 4.



Communicating adequate guidance to emitters allows for clarity and consistency in the emitter information received by the Ministry. See **Section 4.7** for further details on our testing of actual emitter returns submitted and reviewed by the Ministry.

## 4.5 Insufficient Expectations for Staff Evaluating Verification Concerns

The Ministry of Environment had sufficient expectations for staff to evaluate information received from emitters except when third-party verifiers reported concerns with the accuracy of the information.

The Ministry receives all information from emitters via a centralized email account. The Ministry manually tracks returns received in a spreadsheet (e.g., return type, reported year, due date, submitted date, and any notes). While we did not find any issues in the information tracked, we note that a more robust data management system will be needed to support efficiency and accuracy of data processes as the Output-Based Performance Standards (OBPS) Program matures and requires more extensive trend analysis (see **Section 4.2**).

The Ministry outlined in review checklists the expected steps Ministry staff (e.g., emissions engineers) should complete when reviewing each type of required emitter return. While the Ministry did not set formal deadlines for staff to complete reviews, it used the date of the next reporting requirement for the emitter as the maximum time for when staff must complete reviews, including resolving concerns and issuing approvals (see **Figure 8**).

We found the checklists outline who completes each step (i.e., primary or secondary reviewer), documents required for the review, and where to locate documents and communications (e.g., emails from emitters). However, guidance did not include how staff should evaluate concerns third-party verifiers report (see **Section 4.5.1**).

If the Ministry does not receive emitter returns or levy payments within the deadlines, staff first follow up with emitters to attempt voluntary compliance. If the Ministry finds this ineffective, it provides written warnings giving 30, 60, and finally 90 days to comply following a formal process that includes review and approval by the OBPS Program's Executive Director.

If the written warnings do not result in compliance, the Ministry may fine the emitter. *The Management and Reduction of Greenhouse Gases (Standards and Compliance) Regulations, 2023*, outlines a maximum fine of \$10,000 if the emitter fails to comply with the items outlined in **Figure 11**. The Ministry has not imposed a fine to an emitter since the Program began in 2019.

**Figure 11—Examples of Non-compliance Provisions**

Provisions for which an administration penalty may be imposed that includes failure to:

- Provide reports
- Comply with an applicable standard
- Register a regulated facility
- Provide information as required
- Comply with a direction (adverse opinion, correction of errors)
- Fulfil a compliance obligation (i.e., levy)
- Submit returns
- Retain documents

Source: *The Management and Reduction of Greenhouse Gases (Standards and Compliance) Regulations, 2023*, Table 3.

We found the non-compliance guidance reasonable and comparable to other Canadian jurisdictions (i.e., similar guidance and steps to address non-compliance as in other provinces).

As of December 31, 2023, one instance of significant non-compliance occurred in Saskatchewan where a voluntary emitter did not submit baseline and emissions returns by the Ministry's deadlines.<sup>27</sup> The Ministry was actively working with the emitter to receive the outstanding submissions before the compliance return deadline. We found the Ministry followed its guidance and sent a warning letter to the emitter.

#### 4.5.1 Guidance Needed for Addressing Concerns Reported by Third-Party Verifiers

The Ministry of Environment did not provide adequate guidance to staff for evaluating concerns identified in third-party verifier reports about industrial emitter returns.

As part of the review of baseline and emissions returns, Ministry staff confirm that emitters use third-party verifiers accredited in accordance with specific ISO standards (International Organization for Standardization) to verify the accuracy of the returns. See **Figure 12** for further information about the verification process and the different types of verification report opinions.

##### Figure 12—Summary of Verification Process

The Ministry of Environment's standards require emitters to use a third-party verifier to provide assurance that the information submitted in returns is accurate, complete, and in accordance with Ministry standards. This helps the Ministry check that it has adequate data to evaluate emitter compliance with requirements of the OBPS Program.

Verifiers use a variety of activities to validate the data and how it was gathered (e.g., site visits, data review). In their reports, verifiers describe their work (e.g., scope, approach, risk assessment, significance), independence, and opinion.

Verification reports may include one of the following three opinions:

- **Positive (unmodified) opinion** means the third-party verifier did not find any significant errors in the emissions data and data was prepared in accordance with the standards.
- **Positive qualified (modified) opinion** means the third-party verifier did not find any significant errors in the emissions data and data was substantially prepared in accordance with the standards (e.g., estimates used for missing or poor data had no significant impact).
- **Adverse opinion** means the third-party verifier found significant errors in the emissions data or data was not in accordance with the standards (e.g., inappropriate methodology). The Ministry does not accept adverse opinions. It requires the emitter to correct its emissions data within the same compliance year and have the third-party verifier re-issue its verification statement.

Source: Adapted from the Ministry of Environment's OBPS Program guidance.

Of 480 verification opinions on emitter returns up to December 31, 2023, 56 were qualified and four were adverse, as shown in **Figure 13**. The Ministry followed up to confirm the concerns reported did not result in a significant deficiency that would impact levies due or performance credits earned (i.e., accepted all the qualified opinions) or required revised returns with re-issued positive opinions (i.e., for all the adverse opinions).

<sup>27</sup> The Ministry of Environment required voluntary industrial emitters to submit returns within the Ministry's deadlines.

**Figure 13—Type of Verification Opinions for Industrial Facilities from Baseline Year to 2022**

| Types of Opinions              | Baseline Returns | Resubmitted Baseline Returns | Emissions Returns |           |           |           | Total Returns |
|--------------------------------|------------------|------------------------------|-------------------|-----------|-----------|-----------|---------------|
|                                |                  |                              | 2019              | 2020      | 2021      | 2022      |               |
| Positive opinions              | 104              | 13                           | 63                | 71        | 87        | 82        | 420           |
| Qualified opinions             | 30               | 0                            | 9                 | 7         | 6         | 4         | 56            |
| Adverse opinions               | 2                | 0                            | 2                 | 0         | 0         | 0         | 4             |
| <b>Total</b>                   | <b>136</b>       | <b>13</b>                    | <b>74</b>         | <b>78</b> | <b>93</b> | <b>86</b> | <b>480</b>    |
| <b>% Qualified and Adverse</b> | <b>24%</b>       | <b>0%</b>                    | <b>15%</b>        | <b>9%</b> | <b>6%</b> | <b>5%</b> | <b>13%</b>    |

Source: Adapted from information provided by the Ministry of Environment.

Of the 16 facilities we tested, eight had qualified opinions. The Ministry followed up with these facilities to obtain further details and assessed the significance of reported concerns (e.g., methodology to estimate missing emissions data reasonable and will result in consistent measurement over time).

We found the Ministry did not have documented processes that outline the steps staff should take when third-party verifiers report concerns (i.e., adverse or qualified opinions). While Ministry staff addressed the concerns reported to December 31, 2023, more complex concerns may arise in future years where staff need more guidance. For example, staff may need guidance on questions to ask emitters for common types of concerns, when to escalate a concern to their supervisor, or methods to resolve disagreements (such as joint meeting with emitter and verifier, or use of another verifier to validate reported concerns).

Not having written guidance for staff to follow when third-party verifiers report concerns with information submitted by emitters may lead to inappropriate or inconsistent follow up or compliance action for emitter returns, increasing the risk the Ministry may not collect all levies owed or treat all emitters fairly.

**3. We recommend the Ministry of Environment document staff guidance for evaluating concerns identified in third-party verifier reports about industrial emitter returns.**

## 4.6 Qualified Staff Evaluate Emitter Information

The Ministry of Environment uses qualified staff to review emitter information.

The Ministry's staff update standards, register industrial emitters, approve baseline submissions, review emissions returns, and assess levies owed or credits earned through the Output-Based Performance Standards Program. For all key staff positions (e.g., director, managers), we found their job descriptions outlined key responsibilities (e.g., review technical accuracy of emissions data, develop and interpret emissions management regulations).

The majority of the Program's staff are professional engineers. We verified three staff in key positions were active engineers registered with the Association of Professional Engineers and Geoscientists of Saskatchewan, as required.<sup>28</sup>

<sup>28</sup> [register.apegs.ca](http://register.apegs.ca) (28 February 2024).



For staff working toward their educational requirements (e.g., engineering degree), we found the Ministry completed another level of review of this staff's work by using a secondary reviewer who met the educational requirements.

Using qualified staff to evaluate emitter returns and emissions data received from emitters reduces the risk of using inaccurate or incomplete information to regulate compliance by emitters.

## 4.7 Required Emitter Returns Filed

The Ministry of Environment sufficiently monitored whether emitters submit returns (i.e., baseline, emissions, and compliance) by required deadlines as summarized in **Figure 8** and performed detailed reviews of the returns.

### 4.7.1 Baseline Return

A baseline return determines the annual permitted emissions intensity for each emitting facility, includes the quantification methodology used for the intensity calculation, and requires a third-party verification report.

The Ministry of Environment's guidance document provides detailed explanations for calculating the baseline emissions intensity. For new industrial facilities, the baseline emissions intensity calculation is based on the average emissions intensity of the two years after registration approval (for existing facilities, average of any three consecutive years of the previous five years' production except aggregate facilities that use the year prior to registration).

The Ministry's quantification methodology form expects a description of the tools, techniques, and calculations used to measure emissions. It also anticipates a description of operations, emissions sources, key equipment, products, and a listing of the regulated emissions produced (e.g., carbon dioxide, nitrous oxide) by emissions source (e.g., types of fuel, lagoons).

Ministry staff complete a review checklist that outlines required steps when reviewing a baseline return (e.g., check for receipt of all required documents and their location, document any follow up, confirm certification of third-party verifier). The Ministry confirms the verifier's certification with national boards in Canada and the United States that issue relevant accreditations. A second staff completes a final review of the baseline return before the Director signs the approval letter.

Regulated emitters can resubmit a baseline calculation if there is reasonable justification for a baseline change (e.g., change in operations, improvements in emissions reporting such as including flare emissions).

For all 16 baseline returns tested (including re-submitted baselines), we found Ministry staff completed the required reviews and approvals, and facilities submitted the required documents, used the correct emissions/production years in their baseline calculations, and had completed verification by an accredited third-party. The Ministry found these baseline emissions intensity amounts acceptable when monitoring compliance.



We found the Ministry re-assessed baseline calculations for 12 facilities submitted between August 2019 and June 2023. We reviewed reasons for seven of these facilities' reassessments and found the Ministry documented acceptable rationale for the changes to each baseline.

At December 2023, one registered emitter in the Output-Based Performance Standards (OBPS) Program had not submitted a baseline return by the required deadline (i.e., 1.5 years late as of December 2023). The Ministry sent a warning letter to this emitter as outlined in **Section 4.5**.

#### 4.7.2 Annual Emissions Return

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The annual emissions return enables the Ministry of Environment to determine whether a facility exceeds its annual permitted emissions intensity. Annual emissions returns include the quantification methodology for actual emissions and production information, and a third-party verification report.

For 32 emissions returns tested, we found the Ministry completed expected reviews and approvals and asked relevant follow-up questions. We found emitters:

- Provided annual emissions returns timely (by the due date or extended due date)
- Provided all required information for the 2019 to 2022 years for the deadlines up to December 31, 2023
- Used accredited third-party verifiers who declared no conflicts of interest with the industrial emitter they verified

For 2019 and 2020 annual emission returns reviewed by the Ministry, 44 facilities out of 87 exceeded their annual permitted emissions intensity. One emitter used credits earned to pay its levy.

By December 2023, five emitters (33 facilities) earned performance credits by reducing emissions intensity by more than required.

The Ministry had not encountered any emitters in the OBPS Program who sold performance credits to another emitter. See further details on tracking and using performance credits in **Section 4.8**.

#### 4.7.3 Annual Compliance Return

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The Ministry of Environment provides detailed guidance to emitters on the deadlines to submit required annual compliance returns and how to fulfill the levies (i.e., payment into the Saskatchewan Technology Fund or use of performance credits).

Table 4 of *The Management and Reduction of Greenhouse Gases (Standards and Compliance) Regulations, 2023*, outline the payment rates for each tonne of CO<sub>2</sub>e over the permitted emissions intensity. The rates increase over time (e.g., 2019: \$20 per tonne; 2020: \$30 per tonne; 2023: \$65 per tonne; 2030: \$170 per tonne), consistent with rates set by the Federal Government. See **Figure 14** for an example of the reduction requirements and resulting payment rates for the oil and gas sector.

**Figure 14—Example of Reduction Requirements and Payment Rates**

The Regulations require the oil and gas sector to reduce greenhouse gas emissions per production unit by 20% over 12 years. For each compliance (i.e., calendar) year, the reduction is 1.67% (or 20% divided by 12). For example, year 1 is a 1.67% reduction from the baseline; year 2 is a 3.33% reduction from the baseline, and so on. If an industrial emitter is unable to achieve the expected reduction, it pays a levy based on the rate for that year in Table 4 of the Regulations.

For example, if, after completing calculations in accordance with Program requirements, a facility exceeded its permitted emissions intensity by 400 tonnes in 2019, 825 in 2020, and 5,000 tonnes in 2030, it would owe the following levies:

2019: \$8,000 (400 tonnes x \$20)

2020: \$24,750 (825 tonnes x \$30)

2030: \$850,000 (5,000 tonnes x \$170)

Likewise, if an emitter applied performance credits in the above quantities, these credits would have the same values as noted above for the year the credit is used. Note, credits may be bought and sold at amounts determined by the parties to the transaction, but this does not impact their redemption value as each credit is equal to one tonne of emissions intensity.

Source: Adapted from *The Management and Reduction of Greenhouse Gases (Standards and Compliance) Regulations, 2023*, Tables 1 and 4.

For eight compliance returns tested related to 2019 and 2020, we found:

- Emitters used correct rates per legislation to calculate the levy
- The Ministry provided emitters approval letters timely (i.e., within one to three days after review)
- The Ministry provided emitters with confirmation of amounts owing (i.e., number of tonnes of CO<sub>2</sub>e over permitted amounts after performance credits used)
- The Ministry appropriately documented approval for a payment extension

Receiving and reviewing required emitter returns supports Ministry evaluations of emitters' compliance with the OBPS Program.

## 4.8 Enhanced Tracking for Performance Credits Required

The Ministry of Environment lacks a robust system for tracking performance credits of its Output-Based Performance Standards Program.

If actual emissions intensity falls below the permitted emissions for the compliance year, emitters in the Program earn performance credits. These credits can be retired (used) in the future to fulfill the emitter's future levies or sold to other emitters in Saskatchewan. Emitters earn one performance credit for each one tonne CO<sub>2</sub>e below the permitted emissions intensity.<sup>29</sup>

The Ministry maintains and communicates guidance on performance credits to emitters. The guidance outlines key definitions (e.g., performance credit, retire, revoke), how to earn a performance credit, how to use a performance credit to fulfill a levy, how to buy/sell performance credits, and the various terms and conditions with performance credits (e.g., performance credits found to be invalid). We found the performance credit guidance contains enough information to inform regulated emitters about how performance credits are earned, bought/sold, and used.

<sup>29</sup> Prior to January 1, 2023, an emitter earned a performance credit if it reduced emissions 10–15% below the permitted emissions. Credits may be bought and sold at amounts determined by the parties to the transaction, but this does not impact their redemption value as each credit is equal to one tonne of emissions intensity.



The Ministry assigns each performance credit with a unique serial number and tracks it in a spreadsheet noting when it was earned, sold, and used.

We found for five emitters tested:

- For one emitter who earned and used performance credits for 2019 and 2020 compliance years, the value of the credits agreed to the levy amount set out in the Regulations. In addition, the serial numbers of the credits used matched the serial numbers of the credits previously earned by the emitter. The emitter owned a few industrial facilities and used the credits from one facility to pay the levy of three other facilities.
- For four emitters tested who earned but did not use any performance credits for 2019 or 2020 compliance years, the number of serial numbers tracked in the Ministry's spreadsheet agreed to the total amount of tonnes of CO<sub>2</sub>e noted in the compliance calculation.

As the Ministry receives more returns and emitters buy and sell performance credits, it will be harder for the Ministry to accurately track these credits in a spreadsheet. Without a robust system to track credits, there is an increased risk of error or fraud (e.g., where emitters use the same credit more than once). See **Recommendation 2** regarding the need for an effective data management system.

## 4.9 Program Changes Adequately Communicated to Emitters

The Ministry of Environment communicated in a timely manner to stakeholders (e.g., emitters, industry sectors covered by the Program) proposed changes to the Output-Based Performance Standards (OBPS) Program.

There are two reasons the Ministry may initiate changes to the Program:

- To align with Federal Government requirements (minimum requirements set out by Federal legislation)
- To implement Program efficiencies and improvements

Before making large Program changes (e.g., change to legislation), staff will inform the Executive Director, Deputy Minister, and the Minister of these changes for their approval. We found the Ministry followed a structured and reasonable process for making changes to the Program.

The Ministry communicates program changes to its staff responsible for leading the OBPS Program and to emitters via email, as well as through working groups. We found the Ministry communicated timely, consistent, and relevant information with stakeholders, including for a sample of three working groups tested.<sup>30</sup>

<sup>30</sup> The Ministry's Climate Resilience Branch interacts with 13 working groups supporting the OBPS Program. For example, the Ministry's Climate Change Committee includes all divisions within the Ministry. Also, the Regulations and Legislation Working Group includes directors and executive directors from the Ministries of Environment; Energy and Resources; Justice and Attorney General; Agriculture; Finance; and Trade and Export Development, as well as from Innovation Saskatchewan and Executive Council.

For example, in 2021, the Federal Government notified the Ministry of pending changes to the Federal Government requirements effective January 1, 2023 (e.g., annual carbon price increases of \$15/tonne of CO<sub>2</sub>e). The Ministry communicated and consulted with stakeholders for upcoming changes through webinars, working group meetings, and posted relevant changes on its website. We found the Ministry had an adequate communications strategy on upcoming changes to the OBPS Program, including a webinar outlining:

- Amendments to guidance
- Changes to the Regulations
- New reduction requirements (e.g., increase to 20% reduction from baseline level for oil and gas sectors)
- How to re-establish baselines for oil and gas facilities
- Transition to new requirements and the next steps

In November 2022, the Federal Government informed the Ministry of its approval of Program changes effective January 1, 2023. In December 2022, the Ministry informed its stakeholders of this approval.

Effectively communicating with stakeholders assists the Ministry in making proposed changes to the Program and in having stakeholders understand any changes.

## 4.10 Improved Program Performance Reporting to Senior Management and the Public Needed

The Ministry of Environment's reporting to senior management and the public needs improvement.

The Director provides regular updates to the Executive Director on significant issues or concerns as they occur (e.g., emitter non-compliance) within the Output-Based Performance Standards (OBPS) Program. We found staff do not provide formal reporting to senior management, except for significant changes to the Program requiring approval (like changes to guidance or regulations) or significant non-compliance issues. Only one instance of significant non-compliance has occurred since the Program's inception.

At Executive Management Committee meetings, the Executive Director provides verbal updates to senior management on the Program (e.g., new emitter registrations, non-compliance instances).

The Ministry did not report results of the OBPS Program in its annual report for 2022–23, although it provided the public with an update about revenue from levies through the annual report of its Saskatchewan Technology Fund. This provides limited insight into the purpose of the Program and whether it is providing expected benefits. For example, the public has no information on:

- Comparisons of relative changes in emissions intensity and GDP



- Increases in GDP (the economy) resulting from industrial emitter savings due to exemption from the Federal fuel charge
- Whether emissions intensity is trending up or down for various industry sectors
- Impact on emissions intensity when the Ministry starts funding innovations from levies

Better reporting will allow senior management and the public to assess the contributions this Program has on protecting the economy and limiting climate change, as well as possible impacts on national efforts to achieve net-zero emissions by 2050.

The Ministry expects to enhance its reporting to senior management and the public as it sets appropriate measures and targets to evaluate the OBPS Program as described in **Section 4.1**. By clearly linking and quantifying desired outcomes, measures, and targets, the Ministry can better demonstrate to the public what its Program achieved relative to desired outcomes.

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