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## **Independent Practitioners' Limited Assurance Report**

To the management of Pembina Pipeline Corporation ("Pembina")

We have been engaged by the management of Pembina to undertake a limited assurance engagement on certain quantitative performance information disclosed in Pembina's Selected Environmental Indicators Report (the "Report") attached as described below.

### **Subject matter information and applicable criteria**

The scope of our limited assurance engagement, as agreed with management, comprises the following performance information (the 'subject matter information') for the year ending December 31, 2021:

- Scope 1 Greenhouse Gas (GHG) emissions (tCO<sub>2</sub>e)
- Scope 2 GHG emissions (tCO<sub>2</sub>e)

There are no mandatory requirements for the preparation and publication of GHG metrics. As such, Pembina applies the World Resources Institute/World Business Council for Sustainable Development's Greenhouse Gas Protocol Corporate Accounting and Reporting Standard (the 'GHG Protocol') and its own internal reporting guidelines and definitions for GHG reporting which can be found in the Appendix 1 of the Report (collectively the 'applicable criteria').

### **Management's responsibilities**

Management is responsible for:

- The preparation and presentation of the subject matter information in accordance with the applicable criteria, current as at the date of our report;
- Determining the appropriateness of the use of the applicable criteria; and,
- For establishing and maintaining appropriate performance management and internal control systems from which the reported performance information is derived.

### **Practitioner's responsibilities**

Our responsibility is to express a limited assurance conclusion based on evidence obtained. We conducted our engagement in accordance with International Standard on Assurance Engagements ('ISAE') 3410 *Assurance Engagements on Greenhouse Gas Statements*, issued by the International Auditing and Assurance Standards Board. ISAE 3410 requires that we plan and perform this engagement to conclude whether a matter(s) has come to our attention that causes us to believe that the subject matter information is materially misstated.

### **Assurance approach**

We planned and performed our work to obtain all of the evidence, information and explanations we considered necessary in order to form our conclusion as set out below. Our procedures included:



- Inquiries with relevant staff at the corporate, business unit and facility level to understand the data collection and reporting processes for the subject matter information;
- Assessment of the suitability and application of the criteria in respect of the subject matter information;
- Where relevant, performing walkthroughs of data collection and reporting processes for the subject matter information;
- Comparing a sample of the reported data for the subject matter information to underlying data sources;
- Inquiries of management regarding key assumptions and, where relevant, the re-performance of calculations;
- Completion of a site visit to the Redwater facility, including walkthroughs of data collection and reporting processes, interviews with senior management and relevant staff and a virtual site tour; and,
- Reviewing the subject matter information presented in the Report to determine whether it is consistent with our overall knowledge of, and experience with, the emissions performance of Pembina.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than, those applied in a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

We believe the evidence we obtained is sufficient and appropriate to provide a basis for our conclusion.

### **Independence and quality control**

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

The firm applies *International Standard on Quality Control 1* and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

The engagement was conducted by a multidisciplinary team which included professionals with suitable skills and experience in both assurance and GHG accounting.

### **Significant inherent limitations**

Non-financial information, such as that included in the Report, is subject to more inherent limitations than financial information, given the characteristics of the subject matter information and the availability and relative precision of methods used for determining both qualitative and quantitative information. The absence of a significant body of established practice on which to draw allows for the selection of different but acceptable measurement techniques, which can result in materially different measurements and can impact comparability. The nature and methods used to determine such information, as described in the applicable criteria, may change over time, and it is important to read Pembina's GHG reporting methodology available in Appendix 1 of the Report



### **Our conclusion**

Based on the procedures performed, nothing has come to our attention that causes us to believe that for the year ended December 31, 2021, the subject matter information, as described above, has not been prepared and presented, in all material respects, in accordance with the applicable criteria, current as at the date of our report.

*KPMG LLP*

### **Chartered Professional Accountants**

July 20, 2022  
Calgary, Canada

## Selected Environmental Indicators Report

Year ended December 31, 2021

As part of Pembina Pipeline Corporation (“Pembina”)’s continued commitment to refine our reporting methodology, we engaged KPMG LLP (‘KPMG’) to undertake a limited assurance engagement on Pembina’s reported 2021 greenhouse gas (GHG) emissions. The following GHG data are included in the assurance scope. Pembina intends to use this GHG data in future ESG reporting.

Pembina has calculated GHG emissions in accordance with the requirements of the World Resource Institute/World Business Council for Sustainable Development Greenhouse Gas Protocol A Corporate Accounting and Reporting Standard Revised Edition (the “GHG Protocol”) and in accordance with internally developed criteria included in Appendix 1, which form an integral part of this report.

Subject Matter	Key Performance Indicator	Units (metric tonnes CO <sub>2</sub> e)
Climate Change	Scope 1 Greenhouse Gas Emissions <sup>1</sup>	1,827,793
	Scope 2 Greenhouse Gas Emissions <sup>1</sup>	1,307,661

<sup>1</sup>Emissions data is collected for CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and HFCs in metric tonnes and converted to tonnes of CO<sub>2</sub> equivalent based on global warming potentials issued by the United Nations Intergovernmental Panel on Climate Change (IPCC) in their Fourth Assessment Report (AR4).



## Appendix 1

### Greenhouse gas (GHG) reporting evaluation criteria

- Pembina has selected the Operational Control approach to define our organizational boundaries for GHG reporting and includes all material sources and sinks associated with facilities and operations (both corporate and pipeline) that are in direct operational control by Pembina and Pembina subsidiaries.
- Pembina reports Scope 1 (direct emissions from operations such as stationary fuel combustion, mobile combustion, fugitive, flaring, vented emissions and formation CO<sub>2</sub>) and Scope 2 (indirect emissions from purchased and imported electricity and heat consumption).
- Scope 1 emissions are calculated using operational activity data (e.g. fuel consumption data from meters, measured survey data and engineered estimates) multiplied by an operationally derived or the applicable regulated default emission factor. The regulated facilities were verified by 3<sup>rd</sup> party verifiers and confirmed applicable regulated default emission factors were used.
- Energy consumption used to quantify the Scope 1 emission includes all types of fuels consumed by Pembina operations, including natural gas, diesel, gasoline, propane and jet fuel. Fuel consumption is based on a combination of invoiced amounts provided by third party suppliers, meter readings and system generated reports.
- Scope 2 emissions are calculated using location based emission factors from Environment and Climate Change Canada's the most recent National Inventory Report (NIR) for Canadian facilities, U.S. Environmental Protection Agency's Emissions & Generation Resource Integrated Database (eGRID) for US facilities and Alberta Environment and Parks Technology, Innovation and Emission Reduction (TIER) benchmark emission intensity factor for imported heat medium. Initial preparation has begun to prepare Pembina for a transition to market based methodology in the future. Due to the lack of data availability for contractual energy purchases to calculate facility-specific emission factors for all operations, market-based emissions are considered equal to location-based emissions.
- Purchased electricity is included within the Scope 2 emissions. Electricity and imported heat consumption are based on invoiced amounts provided by third party suppliers, with the exception of certain assets which were estimated.
- Pembina has selected 2019 as our base year. Our base year recalculation policy is to recalculate base year emissions for any significant structural changes as a result of major acquisitions, divestments and mergers and meet our significance threshold of  $\pm 15\%$  of Base Year Scope 1+2 emissions.



- Immaterial sources of emissions such as physical and chemical processing emissions, construction activities and non-routine events such as emissions from spills are excluded from reported emissions.
- Small amounts of emissions associated with LACTS, Risers, Valves Sites, Meter Stations and Communications Towers have been accounted for by an additional 0.5% added to the total corporate Scope 1 emissions. Based on previous engineering studies, the 0.5% of Scope 1 for those sources are determined to be conservative.