

## Pembina Pipeline Announces Agreement with Marubeni Corporation to Develop a Low Carbon Ammonia Project and Outlines Vision for Pembina Low Carbon Complex

**CALGARY, ALBERTA, May 30, 2023** – Pembina Pipeline Corporation ("Pembina") (TSX: PPL; NYSE: PBA) is pleased to announce today the signing of a Memorandum of Agreement ("MOA") with Marubeni Corporation ("Marubeni"), to progress an end-to-end, low-carbon ammonia supply chain from Western Canada to Japan and other Asian markets (the "Project"). The Project includes the joint development of a world-scale, low-carbon hydrogen and ammonia production facility (the "Facility") to be sited on Pembina-owned lands adjacent to its Redwater Complex in the Alberta Industrial Heartland near Fort Saskatchewan, Alberta.

"This project represents a transformative opportunity that is highly aligned with Pembina's strategic priorities, including supporting global decarbonization efforts by exporting low-carbon energy derived from natural gas responsibly produced in Western Canada," said Stu Taylor, Pembina's Senior Vice President & Corporate Development Officer. "The Project is an example of Pembina's ability to leverage its existing asset base and core competencies to develop new integrated value chains, including carbon capture, utilization and storage ("CCUS") and low-carbon energy such as hydrogen, and ammonia as a hydrogen carrier and fuel source. Marubeni has deep expertise in areas critical to the success of the Project and we are delighted to be working with them to facilitate the global movement towards greater use of low-carbon ammonia and to support Japan's decarbonization strategy".

Demand for low-carbon ammonia in Japan and other Asian markets is expected to grow substantially given its efficiency as a carrier of hydrogen and use as a low-carbon fuel source. Ammonia is one of the most widely produced synthetical chemicals in the world today and the production technology and handling are well understood and established. Alberta is the leading region in Canada for existing ammonia production and the Project is another opportunity to support development of a hydrogen and low-carbon economy.

"The Project will leverage access to existing infrastructure and benefit from Canada's abundant natural gas supply, advantaged West Coast shipping access to Asia, and growing carbon capture and sequestration industry. Pembina has a long history and strong reputation as a leading Canadian energy infrastructure provider and we are honoured to be working together as partners in the establishment of a low-carbon fuel supply chain from Canada to Japan," said Yoshiaki Yokota, Marubeni's Chief Executive Officer, Energy & Infrastructure Solution Group.

Initial feasibility studies have been completed and the Facility has an anticipated design capacity of up to 185 kilotonnes per annum of low-carbon hydrogen production, which will be converted into approximately one million tonnes per year of low-carbon ammonia. The Facility is contemplated to utilize innovative technology to capture a significant amount of the CO<sub>2</sub> emissions with the potential for integrated transportation and sequestration on the proposed Alberta Carbon Grid being developed by Pembina and TC Energy. The low-carbon ammonia would be transported via rail to Canada's West Coast and shipped to Japan and other Asian markets.

Pembina and Marubeni will utilize their complementary strengths to develop and execute the Project. Pembina brings its expertise in Western Canadian energy infrastructure development, construction and operations, rail logistics and export. Marubeni, a globally leading independent power producer and integrated trading conglomerate, will leverage its marketing and marine logistics capabilities, and is expected to contract for offtake from the Facility, which will be used to supply Marubeni-owned and other Japanese utility power plants. Under the MOA, Pembina and Marubeni will focus on completing work critical to the development of the Project, including preliminary Front End Engineering Design ("pre-FEED"), engagement with various stakeholders, including governments in Canada and Japan, and commercial activities. The Project is expected to be structured as an infrastructure-style, fee-based business with investment grade counterparties. Pre-FEED work is currently expected to be completed by early 2024.

## **Pembina Low Carbon Complex**

The Project would potentially serve as an anchor development to advance Pembina's ongoing efforts to establish a new growth platform known as the Pembina Low Carbon Complex ("PLCC"). With over 2,000 contiguous acres of undeveloped land located in the Alberta Industrial Heartland, Pembina's vision is to develop an industrial complex for low-carbon energy infrastructure to better enable Pembina and third parties to develop projects, while reducing costs, emissions, and risk.

The PLCC will be focused on attracting and developing investment for innovative and emerging energy transition technologies, sustainable fuels, and chemicals, specifically low-carbon hydrogen and hydrogen carriers such as ammonia and methanol. Projects within the PLCC would gain access to one or more of the following prerequisites to enable the construction and operation of large-scale clean energy projects: land, low-carbon hydrogen, clean power, natural gas and industrial gases, water, CCUS, and the construction and operation of rail assets to support product movement.

Within the PLCC, Pembina would lease land to third parties and provide infrastructure, logistics, and shared services to tenants, depending on their needs, under typical Pembina commercial models. Tenants are contemplated to capture CO<sub>2</sub> and direct those emissions to Pembina in support of the proposed Alberta Carbon Grid. Pembina may also consider direct investments in projects.

Commercial discussions are progressing with various potential tenants and strategic partners and Pembina looks forward to providing future updates.

## **About Pembina**

Pembina Pipeline Corporation is a leading energy transportation and midstream service provider that has served North America's energy industry for more than 65 years. Pembina owns an integrated network of hydrocarbon liquids and natural gas pipelines, gas gathering and processing facilities, oil and natural gas liquids infrastructure and logistics services, and a growing export terminals business. Through our integrated value chain, we seek to provide safe and reliable infrastructure solutions which connect producers and consumers of energy across the world, support a more sustainable future and benefit our customers, investors, employees and communities. For more information, please visit pembina.com.

## **Forward-Looking Information and Statements**

This news release contains certain forward-looking statements and forward-looking information (collectively, "forward-looking statements"), including forward-looking statements within the meaning of the "safe harbor" provisions of applicable securities legislation, that are based on Pembina's current expectations, estimates, projections and assumptions in light of its experience and its perception of historical trends. In some cases, forward-looking statements can be identified by terminology such as "continue", "anticipate", "schedule", "will", "expects", "estimate", "potential", "planned", "future", "outlook", "strategy", "protect", "trend", "commit", "maintain", "focus", "ongoing", "believe" and similar expressions suggesting future events or future performance.

In particular, this news release contains forward-looking statements pertaining to, without limitation, the following: details relating to the Project, including location, benefits of the Project, anticipated design capacity of the Facility, use of technology, and the production, transportation and use of low-carbon ammonia; the potential for development opportunities connected to Pembina's infrastructure; expected future demand for low-carbon ammonia and global decarbonization efforts; expectations that Marubeni will contract for offtake from the Facility; expected timing for completion of pre-feed work; that the Project would potentially serve as an anchor development to advance the PLCC; and details relating to the PLCC, including Pembina's vision and focus for the complex in addition to potential commercial structures and offerings available to participants in such complex.

The forward-looking statements are based on certain assumptions that Pembina has made in respect thereof as at the date of this news release regarding, among other things: the demand for low-carbon ammonia and global decarbonization efforts; that technologies will perform as expected; oil and gas industry exploration and development activity levels and the geographic region of such activity; prevailing commodity prices, interest rates, carbon prices, tax rates and exchange rates; the availability of capital to fund future capital requirements relating to the Project and the PLCC; that any required commercial agreements can be reached and the terms on which they can be reached; that all required regulatory and environmental approvals can be obtained on the necessary terms in a timely manner; prevailing regulatory, tax and environmental laws and regulations; and certain other assumptions in respect of Pembina's forward-looking statements detailed in Pembina's Annual MD&A and Annual Information Form for the year ended December 31, 2022 and from time to time in Pembina's public disclosure documents available at www.sedar.com, www.sec.gov and through Pembina's website at www.pembina.com.

Although Pembina believes the expectations and material factors and assumptions reflected in these forward-looking statements are reasonable as of the date hereof, there can be no assurance that these expectations, factors and assumptions will prove to be correct. These forward-looking statements are not guarantees of future performance and are subject to a number of known and unknown risks and uncertainties including, but not limited to: the failure to realize the anticipated benefits of the Project and the PLCC; expectations and assumptions concerning, among other things, customer demand for Pembina's services (particularly services related to the Project and the PLCC); the regulatory environment and decisions; the impact of competitive entities and pricing; the strength and operations of the oil and natural gas production industry and related commodity prices; non-performance or default by counterparties to agreements which Pembina or one or more of its affiliates has entered into in respect of its business; actions by governmental or regulatory authorities; the ability of Pembina to acquire or develop the necessary infrastructure in respect of future development projects; fluctuations in operating results; adverse general economic and market conditions in Canada, North America and worldwide; the ability to access various sources of debt and equity capital; changes in credit ratings; counterparty credit risk; and certain other risks and uncertainties detailed in Pembina's Annual MD&A and Annual Information Form for the year ended December 31, 2022 and from time to time in Pembina's public disclosure documents available at <a href="www.seedar.com">www.seedar.com</a>, <a href="www.seedar.com">wwww.see

This list of risk factors should not be construed as exhaustive. Readers are cautioned that events or circumstances could cause results to differ materially from those predicted, forecasted or projected. The forward-looking statements contained in this news release speak only as of the date of this news release. Pembina does not undertake any obligation to publicly update or revise any forward-looking statements or information contained herein, except as required by applicable laws. The forward-looking statements contained in this news release are expressly qualified by this cautionary statement.

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