

Pembina and TC Energy Partner to Create World-Scale Carbon Transportation and Sequestration Solution: The Alberta Carbon Grid

All financial figures are approximate and in Canadian dollars unless otherwise noted

CALGARY, ALBERTA, June 17, 2021 – Pembina Pipeline Corporation ("Pembina" or "PPL") (TSX: PPL; NYSE: PBA) and TC Energy Corporation ("TC Energy") (TSX, NYSE: TRP) are pleased to share their plan to jointly develop a world-scale carbon transportation and sequestration system which, when fully constructed, will be capable of transporting more than 20 million tonnes of CO_2 annually. By leveraging existing pipelines and a newly developed sequestration hub, the Alberta Carbon Grid ("ACG" or the "Project") represents the infrastructure platform needed for Alberta-based industries to effectively manage their emissions and contribute positively to Alberta's lower-carbon economy and create sustainable long-term value for Pembina and TC Energy stakeholders.

Designed to be an open-access system, the ACG will serve as the backbone of Alberta's emerging carbon capture utilization and storage ("CCUS") industry, connecting the Fort McMurray region, the Alberta Industrial Heartland, and the Drayton Valley region to key sequestration locations and delivery points across the province, and serving multiple industries.

For Canada to achieve its enhanced climate targets, including a 40-45% reduction in greenhouse gas emissions below 2005 levels by 2030, CCUS technology and infrastructure will need to play a vital role. Pembina and TC Energy are uniquely positioned to take a leadership role in the transportation of CO₂ given their collective skills and extensive network of pipeline infrastructure. As a hub-based infrastructure solution accessible to Alberta's largest industrial emitters across industries, ACG will pave the way for Canada to successfully meet its emissions reduction objectives and provides a tangible example of Pembina and TC Energy's commitment to energy diversification, industry collaboration and a lower carbon future.

Support for the Alberta Carbon Grid

"Carbon capture, utilization and storage will lower emissions, create jobs, and increase our competitiveness," said the Honourable Seamus O'Regan Jr., Canada's Minister of Natural Resources. "Congratulations to Pembina and TC Energy for coming together with an integrated CO₂ transportation and storage infrastructure solution to lower emissions in Alberta. This is how we get to net-zero."

"Alberta is already a global leader in advancing and investing in CCUS technology with over \$1.24 billion committed to-date. CCUS is one of the most promising forms of emissions-reduction technology – both in terms

of cost-effectiveness and tangible environmental outcomes. On-going innovation and partnerships are critical to the success of both industry and government in reaching our economic and environmental goals, " said the Honourable Jason Nixon, Minister of Environment and Parks.

"Our government is committed to the development of the emerging CCUS industry in our province. Our province's energy industry is vital to achieving Canada's GHG reduction goals and Alberta companies are global leaders in reducing emissions. By working together to bring forward world-class solutions, innovative companies like Pembina and TC Energy are leading the way to our lower carbon future," said the Honourable Sonya Savage, Alberta's Minister of Energy.

"For more than 65 years, Pembina's integrated network of energy transportation and midstream assets has provided a full spectrum of services to Alberta's energy sector, helping our customers connect to high-value markets and take advantage of opportunities for diversification and growth," said Mick Dilger, Pembina's President and Chief Executive Officer. "The ACG highlights our commitment to customers by helping them solve problems and creating new services; communities, by reducing emissions and using existing infrastructure to reduce the impact to the land; employees, through development of an entirely new line of business and job opportunities; and shareholders through attractive incremental capital investment. Pembina is proud of our commitment to all stakeholders and pleased to leverage our expertise to provide a key market solution toward a lower carbon economy with another industry leading partner."

"It is innovative partnerships like this that excite me about our collective energy future," said François Poirier, Chief Executive Officer and President of TC Energy. "Industry players collaborating to leverage our existing energy infrastructure and expertise to support meaningful emission reductions and reduce our carbon footprint is a great example of how we can secure meaningful new investment opportunities, serve current and future customers and achieve operational excellence while continuing to safely and responsibly deliver the energy people need."

The Alberta Carbon Grid

Through redeployment, retrofits using proven technology, recapitalization, and optimization of surplus capacity across our collective pipeline systems, including, subject to closing of the transaction, through Pembina's proposed acquisition of Inter Pipeline Ltd. ("IPL"), ACG is designed to connect the province's largest sources of industrial emissions to a sequestration location north-east of Redwater, Alberta. The principal segments include:

- North Leg: Pembina and TC Energy plan to retrofit existing pipeline systems, combined with new build expansion to connect the Oil Sands to a sequestration hub. Initial hydraulics indicate a design capacity of up to 40,000 tonnes of CO₂ per day, allowing a significant portion of emissions from the Fort McMurray area to be transported to a sequestration location;
- Central Leg: Pembina and TC Energy plan to retrofit existing pipeline systems, combined with new gathering laterals, to provide interconnectivity in the Alberta Industrial Heartland and gather and deliver CO₂ from and to industrial sources with initial hydraulics indicating a design capacity of 10,000 to 20,000 tonnes per day;
- **Southwest Leg:** Pembina and TC Energy plan to retrofit existing pipeline systems, combined with new build expansion, to form the southwest leg of the system. This portion would capture CO₂ from power generation facilities in the region with possible capacity of 10,000 to 20,000 tonnes per day;

- **Future Legs:** With customer support, Pembina and TC Energy have identified multiple opportunities to extend ACG into other regions, for example Joffre, Christina Lake, Cold Lake or Swan Hills, enabling future expansions and greater connectivity;
- Sequestration: A reservoir near Fort Saskatchewan has been selected, where large volumes of CO₂ will be sequestered in the Basal Cambrian Sands. Permit applications have been prepared and the companies have worked with the Government of Alberta to obtain support for the Project and set a path to obtain sequestration rights. Initial studies indicate this reservoir will be capable of sequestering more than 2,000,000,000 tonnes of CO₂, which represents many decades of sequestration capacity. The companies envision delivering to both the proposed sequestration location as well as 3rd party sequestration locations, establishing the development of a strategically located carbon storage hub in the Fort Saskatchewan region;
- **Partnership:** Pembina and TC Energy are open to other infrastructure owners with suitable existing infrastructure to join the partnership with a view to enhancing the capability and reach of the Project.

Key Benefits of the Alberta Carbon Grid

- World-Scale Carbon Capacity: The open-access system is being designed with the ability to scale up to more than 60,000 tonnes per day of capacity, or 20,000,000 tonnes per annum, representing approximately 10 percent of Alberta's industrial emissions.
- Interconnectivity: Pembina and TC Energy view the ACG as a multi-sector solution with interconnectivity between multiple key hubs for expanded emissions reductions.
- Environment, Cost and Time Benefits: Utilizing existing assets dramatically accelerates timing, greatly reduces cumulative environmental and community impacts, and is significantly less capital intensive than building a new pipeline. Pembina and TC Energy are targeting the first phase to be operational as early as 2025, with the fully scaled solution complete as early as 2027, subject to regulatory and environmental approvals.
- **Economic Development:** The construction and operation of the ACG, along with other investments in CCUS technology and infrastructure, will create an entirely new business platform for each company and create new high-value jobs and support economic growth across Alberta.
- Safe & Reliable Operations: World-leading experts have been engaged to evaluate technical and operating conditions of using existing pipeline systems to transport CO₂. The companies have the skills and experience to safely operate these kinds of systems as the characteristics of CO₂ are very similar to other products which are safely transported today, such as specification ethane. The completed feasibility study demonstrates that ACG is achievable while maintaining high standards of safety and reliability. The companies have been working with regulators to advance the Project.
- **Customer-Focused Solution:** With multiple inlets and outlets, customers will have flexibility to decide delivered CO₂ end-uses including industrial processes and sequestration.
- **Cost Advantaged, Fee Based Commercial Framework:** The full build out of ACG over time represents the potential for a multi-billion-dollar incremental investment by Pembina and TC Energy over time, sustained by a commercial framework comprised of long-term fee-for-service contracts plus a marketing and trading pool to facilitate CO₂ and carbon offset transactions. At the scale proposed and

by repurposing existing pipelines, the tolls on the ACG will be materially less than the current price of carbon in Alberta, ensuring the ACG's long-term competitive viability as a CCUS solution and results in an extremely attractive value proposition for customers.

- **Sequestration:** Pembina and TC Energy bring experience with sequestration, underground cavem storage, and acid gas and water disposal across our collective asset base.
- **Platform for Diversification:** Longer term, ACG creates a new platform with a growing reach across Alberta to facilitate production of blue hydrogen and enhance petrochemical facilities in the future, benefiting the Alberta economy, as well as Pembina and TC Energy shareholders.

Advancing ACG is also an important step in both Pembina's and TC Energy's commitment to reduce greenhouse gas emissions intensity across our businesses while supporting emissions abatement across the industry. Given the shared capabilities in this area, Pembina and TC Energy recognize they must take a leadership role in reducing GHG emissions while proudly supplying the world with affordable and reliable energy.

About Pembina

Pembina is a leading transportation and midstream service provider that has been serving North America's energy industry for more than 65 years. Pembina owns an integrated system of pipelines that transport various hydrocarbon liquids and natural gas products produced primarily in western Canada. Pembina also owns gas gathering and processing facilities; an oil and natural gas liquids infrastructure and logistics business; and is growing an export terminals business. Pembina's integrated assets and commercial operations along the majority of the hydrocarbon value chain allow it to offer a full spectrum of midstream and marketing services to the energy sector. Pembina is committed to identifying additional opportunities to connect hydrocarbon production to new demand locations through the development of infrastructure that would extend Pembina's service offering even further along the hydrocarbon value chain. These new developments will contribute to ensuring that hydrocarbons produced in the Western Canadian Sedimentary Basin and the other basins where Pembina operates can reach the highest value markets throughout the world.

Purpose of Pembina:

To be the leader in delivering integrated infrastructure solutions connecting global markets:

- Customers choose us first for reliable and value-added services;
- Investors receive sustainable industry-leading total returns;
- **Employees** say we are the 'employer of choice' and value our safe, respectful, collaborative and fair work culture; and
- **Communities** welcome us and recognize the net positive impact of our social and environmental commitment.

Pembina is structured into three Divisions: Pipelines Division, Facilities Division and Marketing & New Ventures Division.

Pembina's common shares trade on the Toronto and New York stock exchanges under PPL and PBA, respectively. For more information, visit <u>www.pembina.com</u>.

About TC Energy

We are a vital part of everyday life — delivering the energy millions of people rely on to power their lives in a sustainable way. Thanks to a safe, reliable network of natural gas and crude oil pipelines, along with power generation and storage facilities, wherever life happens — we're there. Guided by our core values of safety, responsibility, collaboration and integrity, our 7,500 people make a positive difference in the communities where we operate across Canada, the U.S. and Mexico.

TC Energy's common shares trade on the Toronto (TSX) and New York (NYSE) stock exchanges under the symbol TRP. To learn more, visit us at <u>TCEnergy.com</u>.

Forward-Looking Statements and Information

This document 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 "expects", "will", "would", "anticipates", "plans", "estimates", "develop", "intends", "potential", "continue", "could", "create", and similar expressions suggesting future events or future performance.

In particular, this document contains forward-looking statements pertaining to, without limitation, the following: ACG, including its anticipated capacity, composition, geographic scope, environmental impact, cost, completion date, safety, reliability and the expected benefits thereof for customers (including in regards to expected tolls), communities, employees and shareholders; the expected contribution of ACG towards Alberta's CCUS industry and the transition towards a lower-carbon economy; the expected long-term impacts of ACG on the production of blue hydrogen and the development of petrochemical facilities in Alberta; the impact of ACG and other private sector investments in CCUS technology on job creation and economic growth in Alberta; the expected importance of CCUS technology infrastructure generally, and ACG in particular, in relation to Canada's enhanced climate targets; Pembina's competitive advantages, including related experience, with respect to the transportation of CO₂; Pembina's Carbon Stand and its commitment to energy diversification, reducing greenhouse gas emissions intensity and industry collaboration; and the acquisition of IPL.

These 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: that ACG will perform in a manner that is consistent with management expectations in relation thereto; that ACG will be operational on time and on budget in accordance with current expectations; the ability of Pembina and IPL to satisfy the conditions to closing of the acquisition by Pembina of IPL in a timely manner and on acceptable terms; that favourable circumstances continue to exist in respect of current operations and current and future growth projects; the availability of capital to fund future capital requirements relating to existing assets and projects; oil and gas industry exploration and development activity levels and the geographic region of such activity; prevailing regulatory, tax and environmental laws and regulations; the ability of Pembina to maintain favourable credit ratings (both before and following the acquisition of IPL); future cash flows; prevailing commodity prices, interest rates, carbon prices, tax rates and exchange rates; future operating costs; geotechnical and integrity costs; that any required commercial agreements can be reached; that any third-party projects relating to Pembina's growth projects will be sanctioned and completed as expected; that all required regulatory and environmental approvals can be obtained on the necessary terms in a timely manner; that counterparties will comply with contracts in a timely manner; that there are no unforeseen events preventing the performance of contracts or the completion of the relevant facilities; that there are no unforeseen material costs relating to the relevant facilities which are not recoverable from customers; maintenance of operating margins; the amount of future liabilities relating to lawsuits and environmental incidents; and the availability of coverage under Pembina's insurance policies (including in respect of Pembina's business interruption insurance policy).

Although Pembina believes the expectations and material factors and assumptions reflected in these forwardlooking 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 ACG; material cost-overruns in respect of ACG or a material delay to the expected operational date for ACG; expectations and assumptions concerning, among other things: customer demand for Pembina's services (particularly services pertaining to its planned carbon transportation and sequestration system); commodity prices and interest and foreign exchange rates; planned synergies, capital efficiencies and cost-savings; applicable tax laws; future production rates; the sufficiency of budgeted capital expenditures in carrying out planned activities; labour and material shortages; in relation to the acquisition by Pembina of IPL, the ability of the parties to receive, in a timely manner, the necessary regulatory, court, securityholder, stock exchange and other third-party approvals, including but not limited to the receipt of applicable competition approvals; 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; the impact of competitive entities and pricing; reliance on key relationships and agreements; reliance on third parties to successfully operate and maintain certain assets; the strength and operations of the oil and natural gas production industry and related commodity prices; the continuation or completion of third-party projects; the regulatory environment and decisions and Indigenous and landowner consultation requirements; actions by governmental or regulatory authorities, including changes in tax laws and treatment, changes in the regulation of competition in Canada and elsewhere; changes in royalty rates, climate change initiatives or policies or increased environmental regulation; fluctuations in operating results; adverse general economic and market conditions in Canada, North America and worldwide, including changes, or prolonged weaknesses, as applicable, in interest rates, foreign currency exchange rates, commodity prices, supply/demand trends and overall industry activity levels; risks relating to the current and potential adverse impacts of the COVID-19 pandemic; constraints on existing infrastructure and the unavailability of adequate infrastructure; the political environment in North America and elsewhere, and public opinion; lower than anticipated results of operations and accretion from Pembina's business initiatives; ability to access various sources of debt and equity capital; changes in credit ratings; counterparty credit risk; technology and cyber security risks; natural catastrophes; and certain other risks detailed 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.

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 document speak only as of the date of this document. 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 document are expressly qualified by this cautionary statement.

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