

# CO<sub>2</sub> Storage and Enhanced Oil Recovery: The Weyburn Story

Presentation by:

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# Future Oriented Information

In the interest of providing EnCana Corporation (“EnCana” or the “Company”) shareholders and potential investors with information regarding the Company and its subsidiaries, including management’s assessment of the Company’s future plans and operations, certain statements and graphs throughout these presentations contain “forward-looking statements” within the meaning of the United States Private Securities Litigation Reform Act of 1995 or “forward-looking information” within the meaning of applicable Canadian securities legislation. Forward-looking statements in these presentations include, but are not limited to, statements and graphs (collectively “statements”) with respect to the Weyburn project, including its future production potential and ultimate recoveries, volume of incremental oil recovery over 30 years, including production forecasts from 2007 through 2025; CO<sub>2</sub> storage estimates during the enhanced oil recovery (EOR) phase from 2007 through 2055; cost per tonne of CO<sub>2</sub> supply for EOR and the long term availability of CO<sub>2</sub> supply, future annualized production, the amount of CO<sub>2</sub> which may be injected, the projected quantity of incremental production resulting from CO<sub>2</sub> injection and projections for geologic storage of CO<sub>2</sub> at Weyburn and the potential efficacy of CO<sub>2</sub> sequestration on climate change.

You are cautioned not to place undue reliance on forward-looking information, as there can be no assurance that the plans, intentions or expectations upon which it is based will occur. By its nature, forward-looking information involves numerous assumptions, known and unknown risks and uncertainties, both general and specific, that contribute to the possibility that the predictions, forecasts, projections and other forward-looking statements will not occur. Although the Company believes that the expectations represented by such forward-looking statements are reasonable, there can be no assurance that such expectations will prove to be correct. Some of the risks and other factors which could cause results to differ materially from those expressed in the forward-looking statements contained in these presentations include, but are not limited to: volatility of and assumptions regarding crude oil and natural gas prices, assumptions based upon the Company’s current guidance, fluctuations in currency and interest rates, product supply and demand, market competition, risks inherent in the Company’s North American and foreign oil and gas and midstream operations, risks inherent in the Company’s marketing operations, including credit risks, imprecision of reserves estimates and estimates of recoverable quantities of oil, bitumen, natural gas and liquids from resource plays and other sources not currently classified as proved reserves, refining and marketing margins, potential disruption or unexpected technical difficulties in developing new products and manufacturing processes, potential failure of new products to achieve acceptance in the market, unexpected cost increases or technical difficulties in constructing or modifying manufacturing or refining facilities, unexpected difficulties in manufacturing, transporting or refining synthetic crude oil, risks associated with technology, the Company’s ability to replace and expand oil and gas reserves, the Company’s ability to either generate sufficient cash flow from operations to meet its current and future obligations or obtain external sources of debt and equity capital, general economic and business conditions, the Company’s ability to enter into or renew leases, the timing and costs of well and pipeline construction, the Company’s ability to make capital investments and the amounts of capital investments, imprecision in estimating the timing, costs and levels of production and drilling, the results of exploration and development drilling, imprecision in estimates of future production capacity, the Company’s ability to secure adequate product transportation, uncertainty in the amounts and timing of royalty payments, imprecision in estimates of product sales, changes in environmental and other regulations or the interpretations of such regulations, political and economic conditions in the countries in which the Company operates, the risk of war, hostilities, civil insurrection and instability affecting countries in which the Company operates and terrorist threats, risks associated with existing and potential future lawsuits and regulatory actions brought against the Company, and such other risks and uncertainties described from time to time in the Company’s reports and filings with the Canadian securities authorities and the United States Securities and Exchange Commission. Accordingly, the Company cautions that events or circumstances could cause actual results to differ materially from those predicted. Statements relating to “reserves” or “resources” or “resource potential” are deemed to be forward-looking statements, as they involve the implied assessment, based on certain estimates and assumptions that the resources and reserves and resource potential described exist in the quantities predicted or estimated, and can be profitably produced in the future. You are cautioned that the foregoing list of important factors is not exhaustive. You are further cautioned not to place undue reliance on forward-looking statements contained in these presentations, which are made as of the date hereof, and, except as required by law, the Company undertakes no obligation to update publicly or revise any forward-looking information, whether as a result of new information, future events or otherwise. The forward-looking statements contained in these presentations are expressly qualified by this cautionary statement.

# EnCana Disclosure Protocols

EnCana's disclosure of reserves data and other oil and gas information is made in reliance on an exemption granted to EnCana by Canadian securities regulatory authorities which permits it to provide such disclosure in accordance with U.S. disclosure requirements. The information provided by EnCana may differ from the corresponding information prepared in accordance with Canadian disclosure standards under National Instrument 51-101 (NI 51-101). The reserves quantities disclosed in these presentations represent net proved reserves calculated using the standards contained in Regulation S-X of the U.S. Securities and Exchange Commission. Further information about the differences between the U.S. requirements and the NI 51-101 requirements is set forth under the heading "Note Regarding Reserves Data and Other Oil and Gas Information" in EnCana's Annual Information Form.

Certain crude oil and natural gas liquids ("NGLs") volumes that have been converted to millions of cubic feet equivalent ("MMcfe") or thousands of cubic feet equivalent ("Mcf") on the basis of one barrel ("bbl") to six thousand cubic feet ("Mcf"). Also, certain natural gas volumes have been converted to barrels of oil equivalent ("BOE"), thousands of BOE ("MBOE") or millions of BOE ("MMBOE") on the same basis. MMcfe, Mcfe, BOE, MBOE and MMBOE may be misleading, particularly if used in isolation. A conversion ratio of one bbl to six Mcf is based on an energy equivalency conversion method primarily applicable at the burner tip and does not necessarily represent value equivalency at the well head.

EnCana uses the terms resource play and estimated ultimate recovery. Resource play is a term used by EnCana to describe an accumulation of hydrocarbons known to exist over a large areal expanse and/or thick vertical section, which when compared to a conventional play, typically has a lower geological and/or commercial development risk and lower average decline rate. As used by EnCana, estimated ultimate recovery (EUR) has the meaning set out jointly by the Society of Petroleum Engineers and World Petroleum Congress in the year 2000, being those quantities of petroleum which are estimated, on a given date, to be potentially recoverable from an accumulation, plus those quantities already produced therefrom.

Finding, development and acquisition cost is calculated by dividing total capital invested in finding, development and acquisition activities by additions to proved reserves, before divestitures, which is the sum of revisions, extensions, discoveries and acquisitions. Proved reserves added in 2006 included both developed and undeveloped quantities. EnCana's finding, development and acquisition costs per Mcfe for (i) its most recent financial year (ended December 31, 2006) was \$2.07; (ii) its second most recent financial year (ended December 31, 2005) was \$1.36; and (iii) the average of its three most recent financial years was \$1.66.

For certain prospects, the Company calculates and discloses a full cycle F & D cost, which is defined to be the estimated total capital investment required over the full economic life of the prospect divided by the estimated ultimate recovery (EUR) of the prospect.

For convenience, references in these presentations to "EnCana", the "Company", "we", "us" and "our" may, where applicable, refer only to or include any relevant direct and indirect subsidiary corporations and partnerships ("Subsidiaries") of EnCana Corporation, and the assets, activities and initiatives of such Subsidiaries.

All information included in these presentations is shown on a US dollar, after royalties basis unless otherwise noted. Sales forecasts reflect the mid-point of current public guidance on an after royalties basis. Current (2007) Corporate Guidance assumes a U.S. dollar exchange rate of \$0.885 for every Canadian dollar.

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# EnCana Corporation

- North American industry leader in unconventional natural gas and integrated oilsands development
- Among the largest holders of oil and gas resource lands in onshore North America
- Strive to make a positive difference in the communities where we operate
- Committed to taking action on mitigating emissions and striving to lessen our environmental footprint



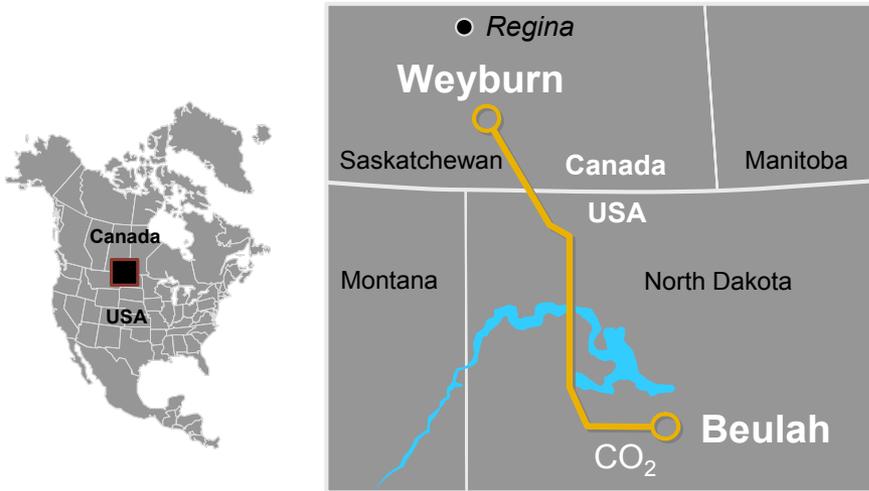
# Basics of Carbon Capture and Storage

- *Separation of CO<sub>2</sub> from industrial and energy-related sources, transport to a storage location and long term isolation from the atmosphere.*
- Three types:
  - Natural carbon sinks
  - Enhanced product recovery (oil, gas, coal bed methane)
  - CO<sub>2</sub> waste storage
- Growing focus of energy technology strategies
- Efforts to validate the potential of the technology re: climate change mitigation

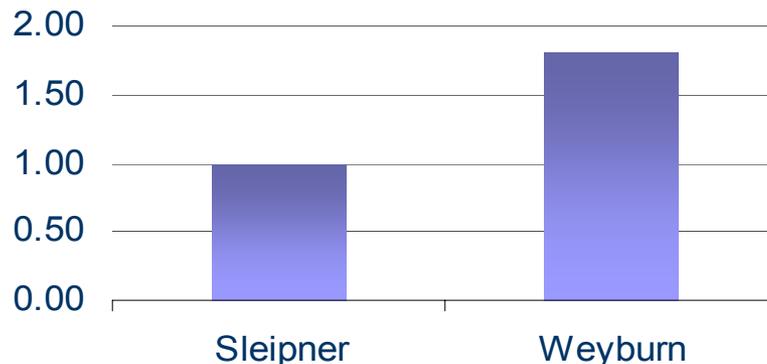


# EnCana Weyburn:

## *An Environmental and Commercial Win-Win*



Annual CO<sub>2</sub> Storage  
(MMT)



- Largest CO<sub>2</sub> Enhanced Oil Recovery (EOR) project in Canada: OOIP 1.4 Bbbl
- Outstanding EOR response
- Six year record of demonstrating CO<sub>2</sub> storage at commercial scale
- World's largest geological storage project with over 9 million tonnes stored to date
  - Studied intensively by the International Energy Agency

# Dakota Gasification Company – Great Plains Synfuels Plant

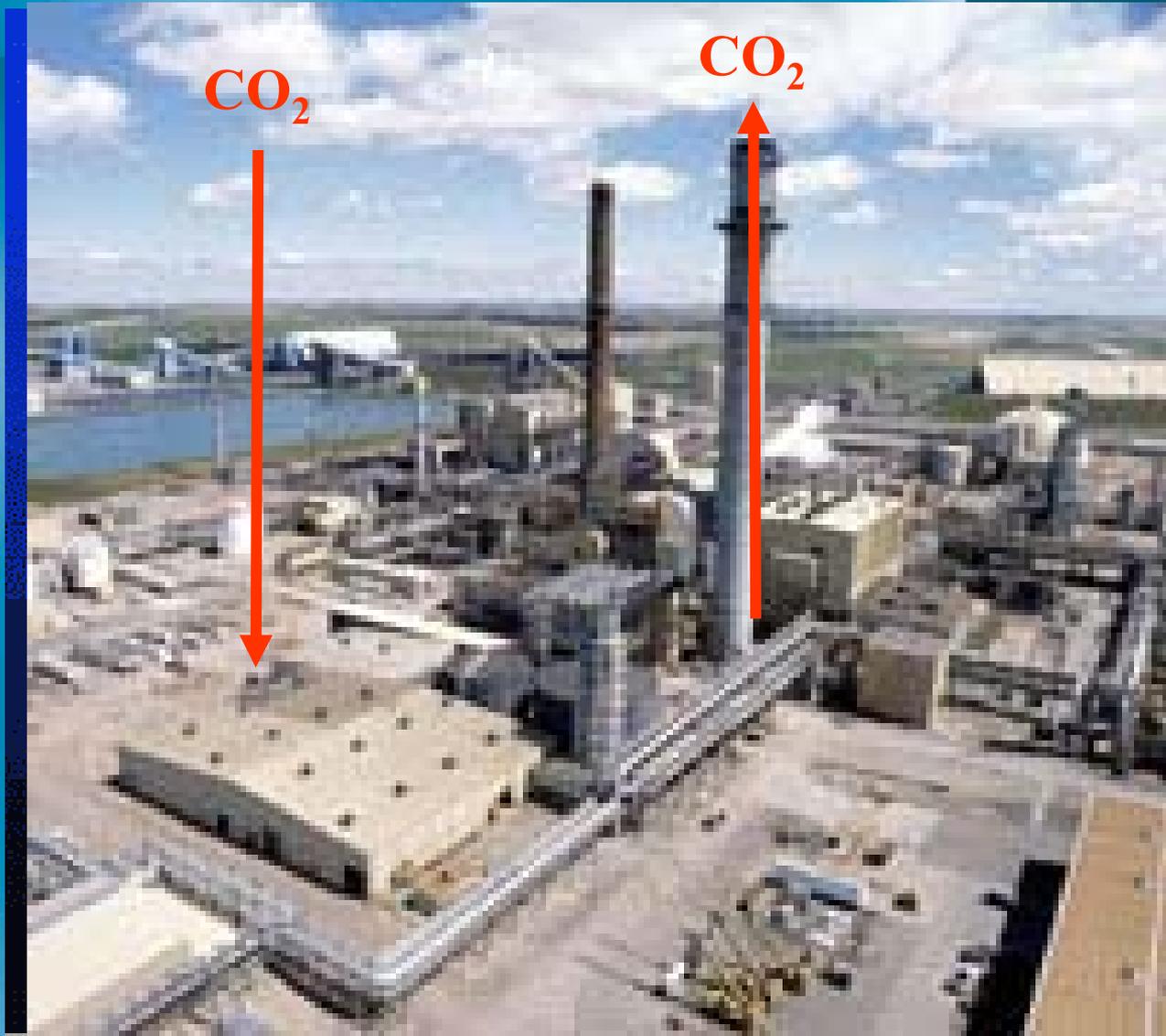
- Located in Beulah, North Dakota. Connected to Weyburn via a 200 mile CO<sub>2</sub> pipeline
- In Operation since 1984 producing 150mmcf of synthetic natural gas from 16,000 tons/day of coal
- Also produces fertilizers, nitrogen and other petrochemical feedstocks



# The Weyburn Project: Enhanced Recovery through CO<sub>2</sub> Injection



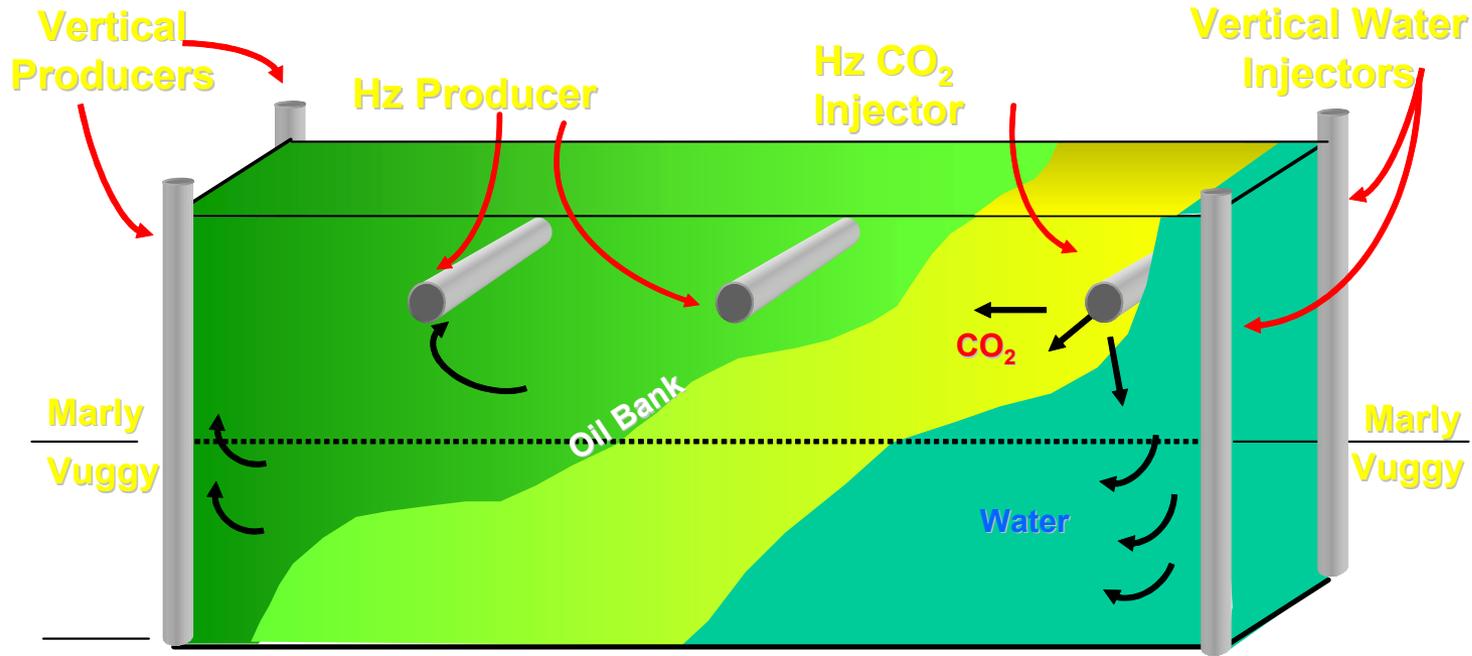
*Stack to Storage- Industrial Emissions to Value Creation*



Oil to  
Market

# Weyburn CO<sub>2</sub> EOR

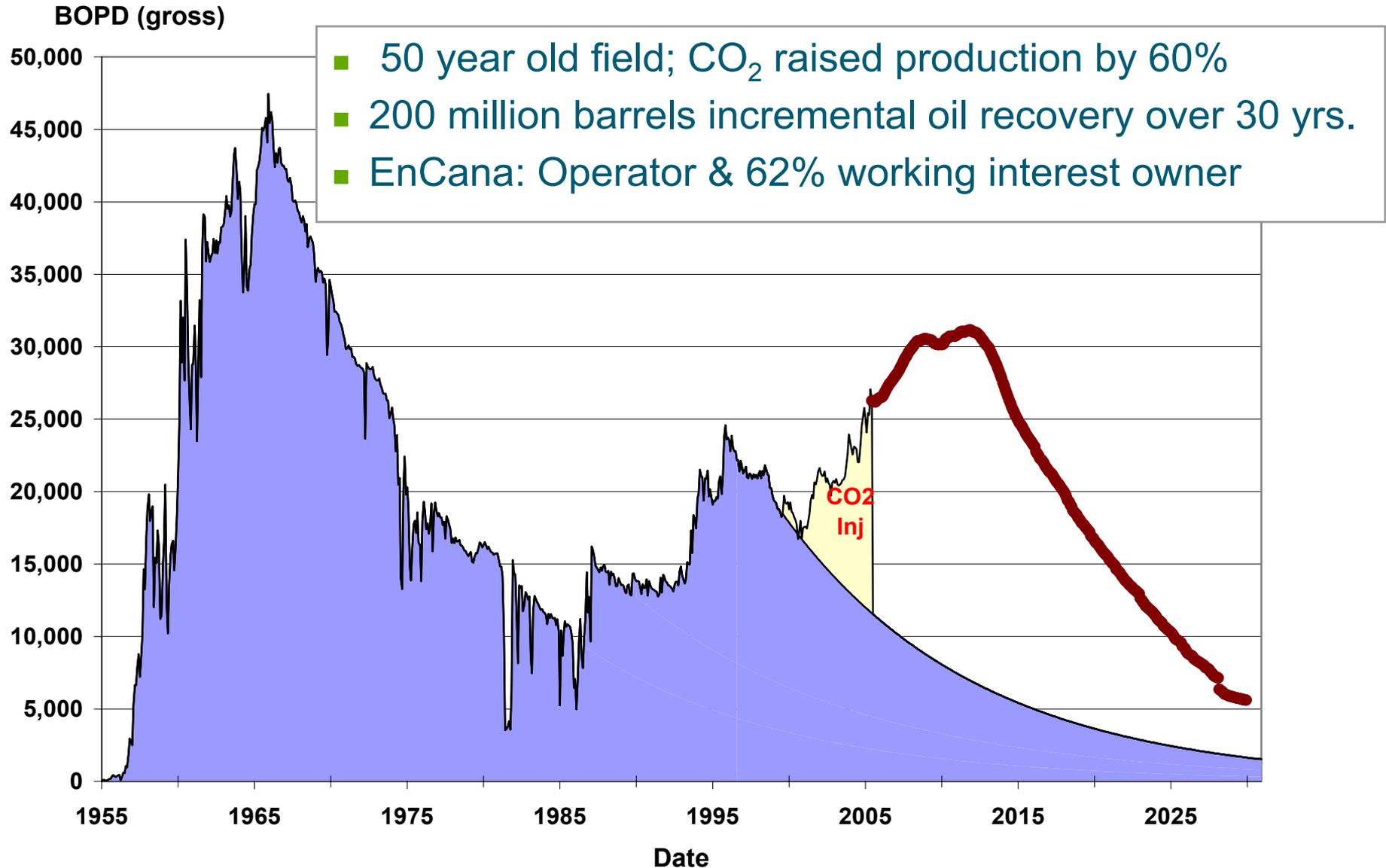
## How CO<sub>2</sub> EOR Works



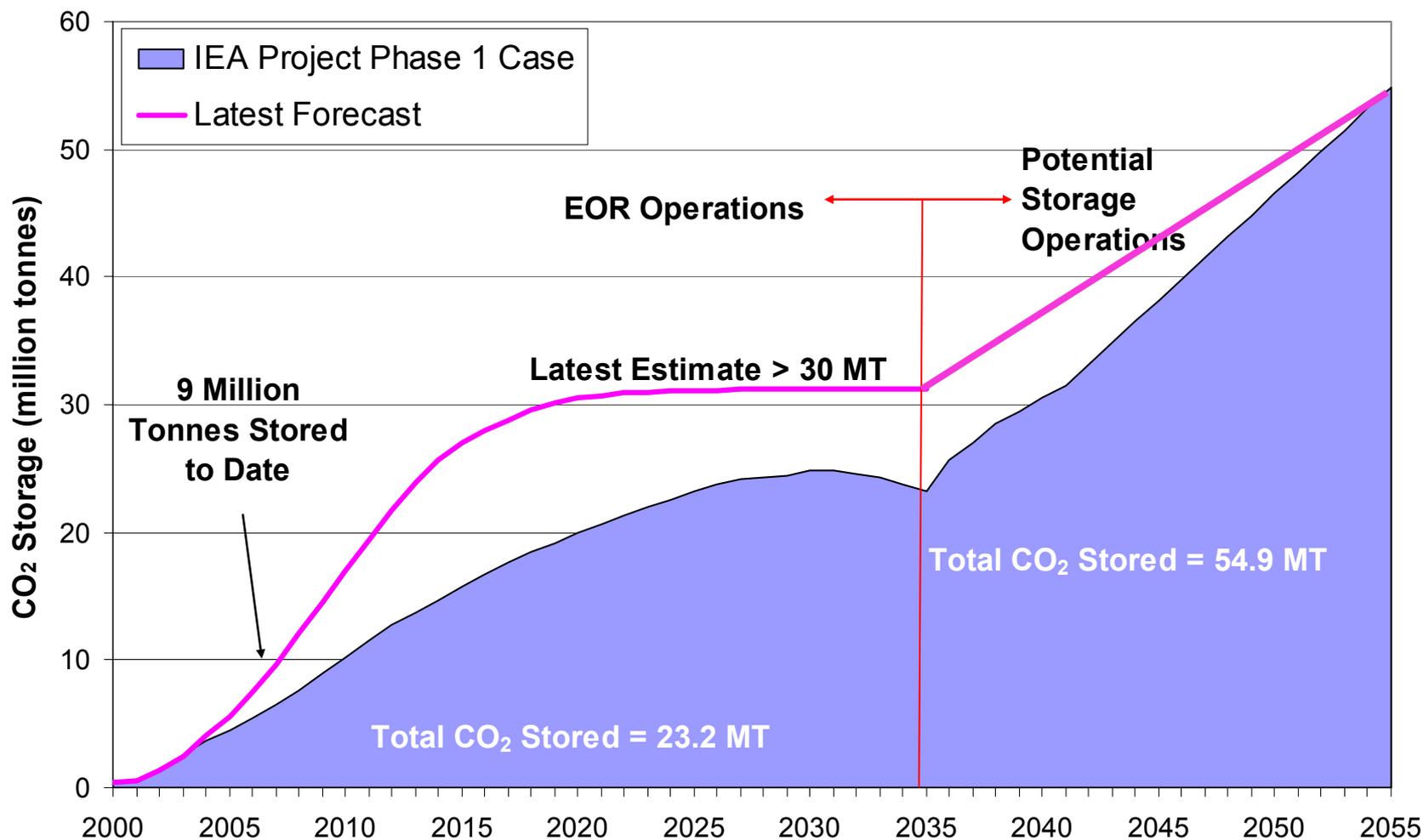
CO<sub>2</sub> is injected at high pressure where it essentially acts as a solvent for oil:

- washes it from between the pore spaces in the rock
- reduces the viscosity so that it flows more easily
- causes it to swell and expand out of pore spaces

# Weyburn Oil Production



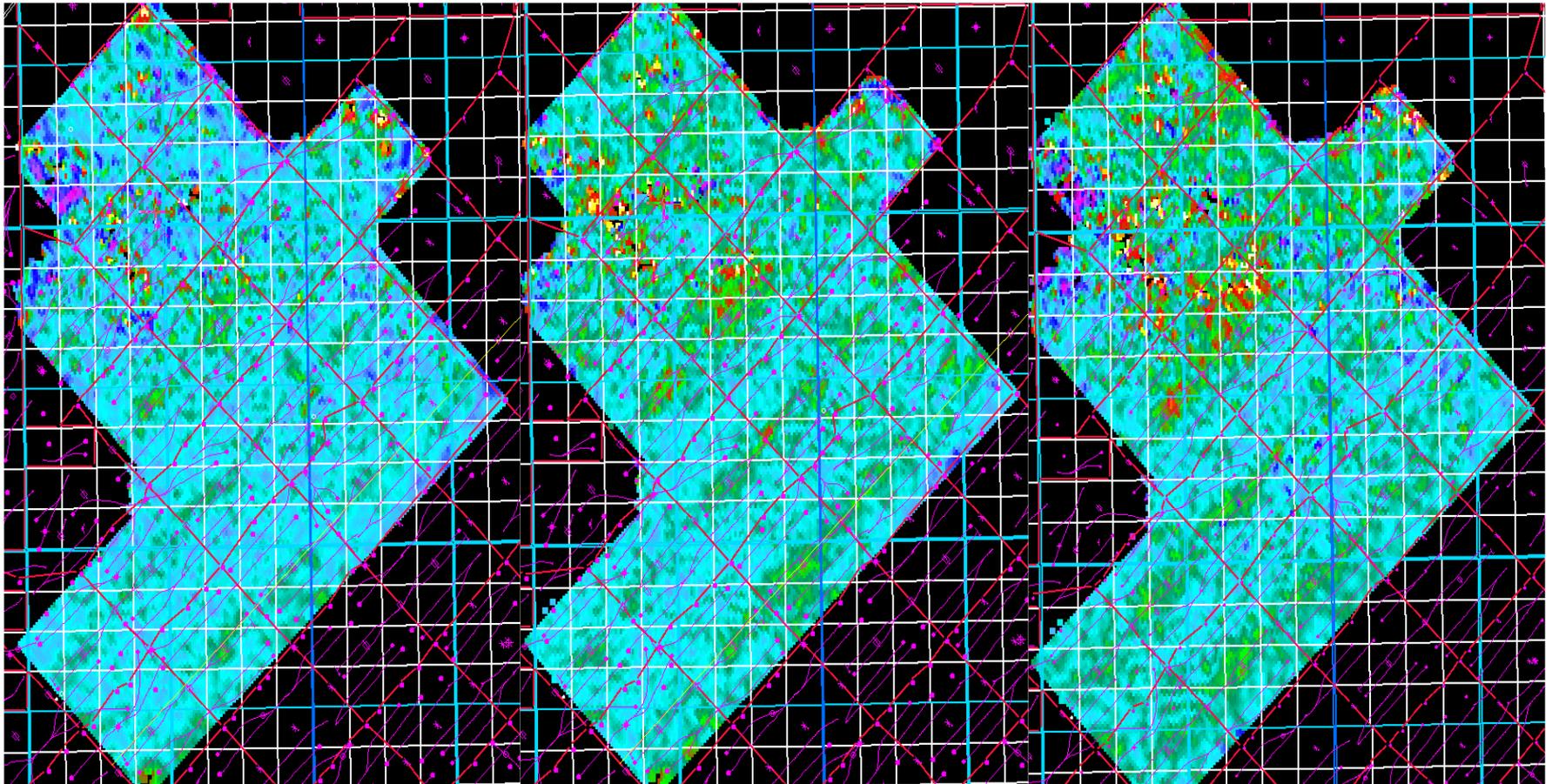
# Forecasted Weyburn CO<sub>2</sub> Storage Capacity



**CO<sub>2</sub> storage at Weyburn - independently verified by IEA project**

# “Seeing the CO<sub>2</sub>” thru Seismic

*Weyburn CO<sub>2</sub> Flood*



Baseline – 2001

Baseline – 2002

Baseline – 2004

# CO<sub>2</sub> Enhanced Oil Recovery Projects World Wide

## O&G Journal EOR Survey 2006

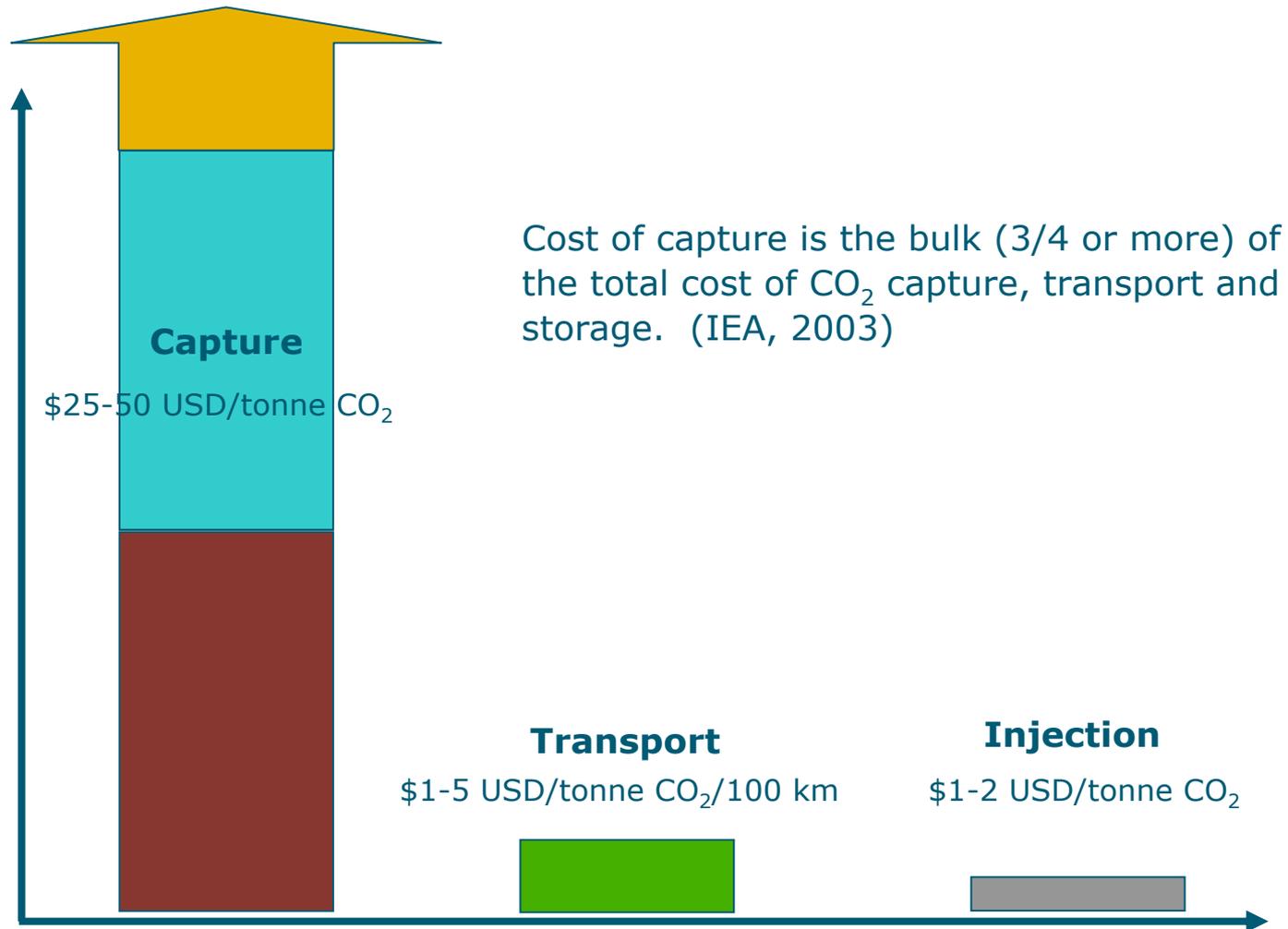
- CO<sub>2</sub> projects
  - Miscible 86 : US 80, Can 6, other 0
  - Immiscible 7 : US 2, Can 0, other 6
  - Planned 06/07 : US 16
- Reservoir type
  - Sandstone 33%
  - Carbonate 67%
- Most projects use naturally occurring sources of CO<sub>2</sub>

## Leveraging CO<sub>2</sub>-EOR CO<sub>2</sub> Supply – A Critical Component

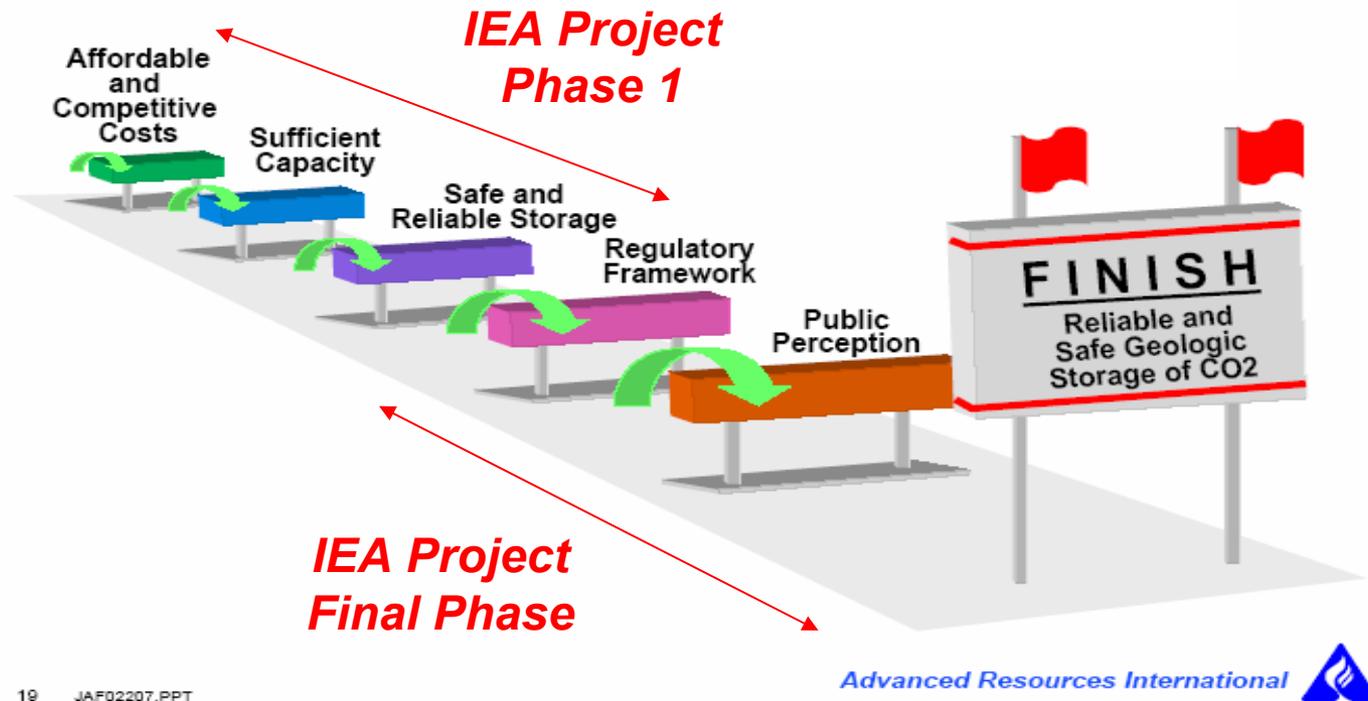
### Characteristics of CO<sub>2</sub> Supply for EOR

- High Pressure: > 2000 psi
- High Purity: > 95%
- Scale & Deliverability
  - Weyburn injects 125mmcf/d of CO<sub>2</sub>
- Long Term Availability: ~10+ years
- Proximity to Target Fields: < 300 mile radius
- Low Cost - \$US 20-30/tonne

# CO<sub>2</sub> Business Fundamentals



# IEA GHG Weyburn CO<sub>2</sub> Storage and Monitoring Project *Towards a Broader Implementation of Carbon Storage*



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**Phase 1** - CO<sub>2</sub> storage at Weyburn independently verified through IEA research project

**Final Phase** - Developing protocols for other CO<sub>2</sub> geo-sequestration projects

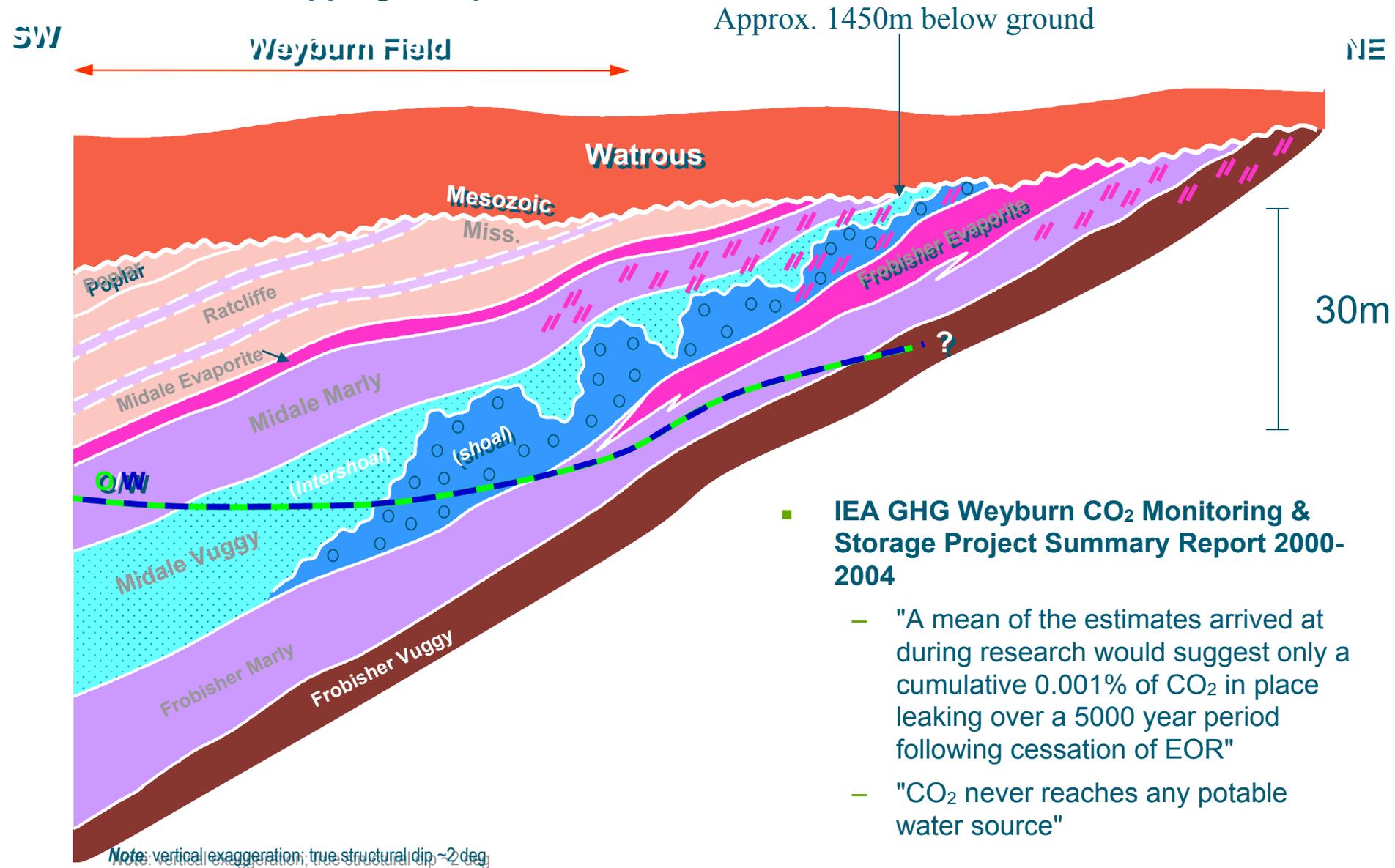
# IEA GHG Weyburn CO<sub>2</sub> Storage and Monitoring Project – Phase 1

- Largest in-the-field scientific study in the world
- Studied geological storage of CO<sub>2</sub> via EnCana's Weyburn CO<sub>2</sub> EOR field
- Valued results, per EnCana perspective:
  - Prove that geologic settings can store CO<sub>2</sub> on a long-term basis
  - Predictive, monitoring, and verification techniques (“Seeing the CO<sub>2</sub>” via time lapse 3D seismic)
- Collaboration between governments (6), industry (9) and research institutions
- Project managed by Petroleum Technology Research Centre, Saskatchewan

More than 200 tours to Weyburn field site:  
academics, oil and gas industry, foreign governments, media.

# Weyburn Field

## Reservoir and Trapping Components



- IEA GHG Weyburn CO<sub>2</sub> Monitoring & Storage Project Summary Report 2000-2004
  - "A mean of the estimates arrived at during research would suggest only a cumulative 0.001% of CO<sub>2</sub> in place leaking over a 5000 year period following cessation of EOR"
  - "CO<sub>2</sub> never reaches any potable water source"

# IEA GHG Weyburn CO<sub>2</sub> Storage and Monitoring Project – Final Phase

- To collaboratively develop practical protocols that guide field implementation of CO<sub>2</sub> geological storage projects to reduce CO<sub>2</sub> emissions in the atmosphere
- Outputs and challenges to address:
  - Best Practices Manual
    - Site Selection
    - Monitoring and Verification
    - Wellbore Integrity
    - Performance Assessment
  - Regulation (e.g. long-term reliability and safety)
  - Policy (e.g. CO<sub>2</sub> Infrastructure, R&D)
  - Outreach (e.g. public awareness, consultation)

# Weyburn CO<sub>2</sub> Storage and EOR Project

## *Final thoughts*

1. EnCana Weyburn - A commercial-scale business with a 7 year track record in CO<sub>2</sub> storage and EOR  
→ 9 million tonnes of CO<sub>2</sub> stored to date.
2. Host of world class independent research (IEA Project) which has concluded that geological storage of CO<sub>2</sub> is safe and reliable.
3. Canada is a leader in CO<sub>2</sub> storage – A pragmatic technology and key component of environmental strategy.
4. EnCana Weyburn leads the way – Our experience can guide future CO<sub>2</sub> geological storage projects.
5. The IEA estimates that up to 10,000 Billion tonnes of CO<sub>2</sub> could be stored by applying this technology on a world-wide scale.

*Weyburn is a win-win solution.*