

Will Canada's Oil Sands Industry Survive the Market Turmoil?

6th Annual Canadian Oil Sands Summit
Insight Information

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Calgary, Alberta

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Strategy West Inc.

Photo Source: Syncrude Canada Limited

Presentation Outline

- Economic Environment and Industry Outlook before the Crash
- The Current Situation
 - Industry Challenges
 - Industry Economics
- Industry Outlook after the Crash: Two Scenarios
 - Prolonged Downturn
 - Early Recovery
- Conclusions

2

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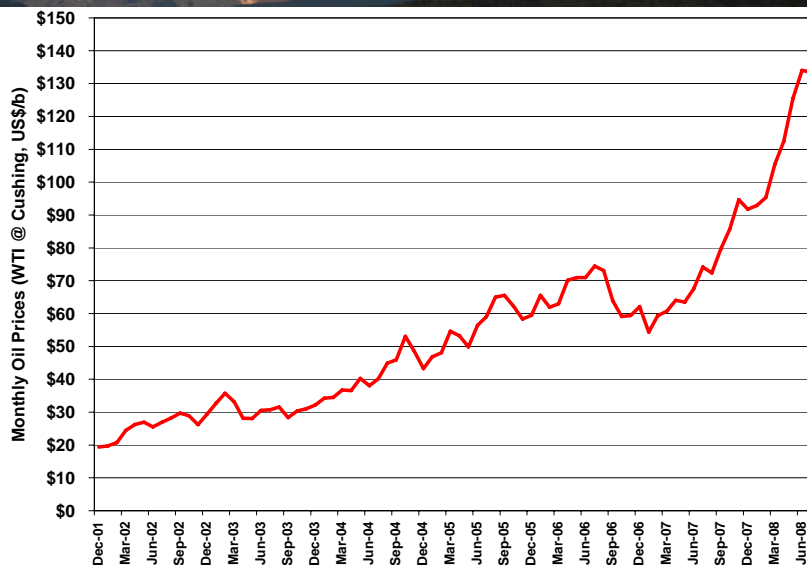
Before the Crash

- Global Oil Markets
 - Strong oil demand growth
 - Oil supply constraints
 - Surging oil prices
- Canada's Oil Sands
 - Attractive investment opportunities led to frenzied industry activity
 - The rapid development pace led to challenges respecting:
 - Project costs
 - Societal impacts
 - Environmental impacts

3

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Crude Oil Prices to July 2008

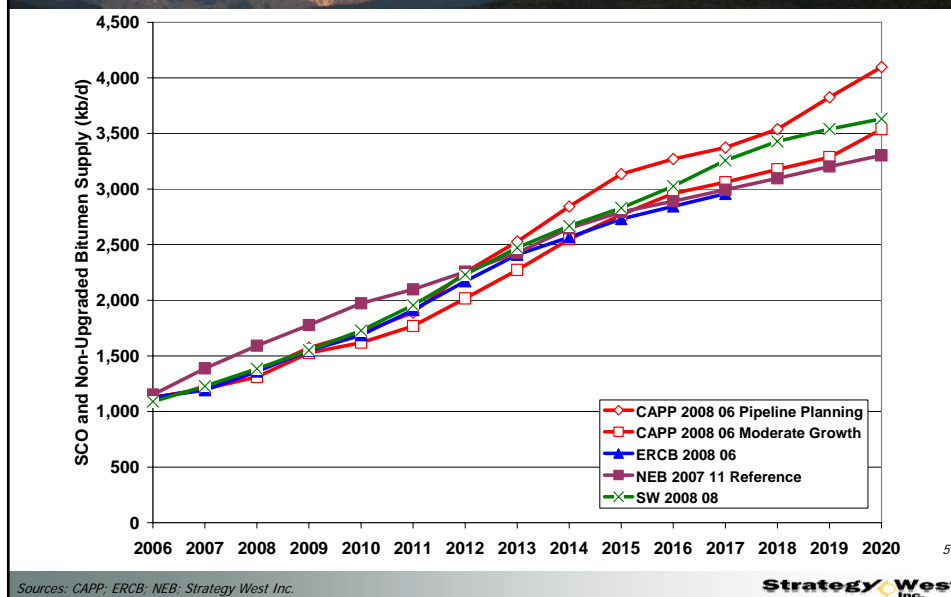


4

Sources: Canadian Association of Petroleum Producers, Imperial Oil Limited

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Industry Outlooks before the Crash



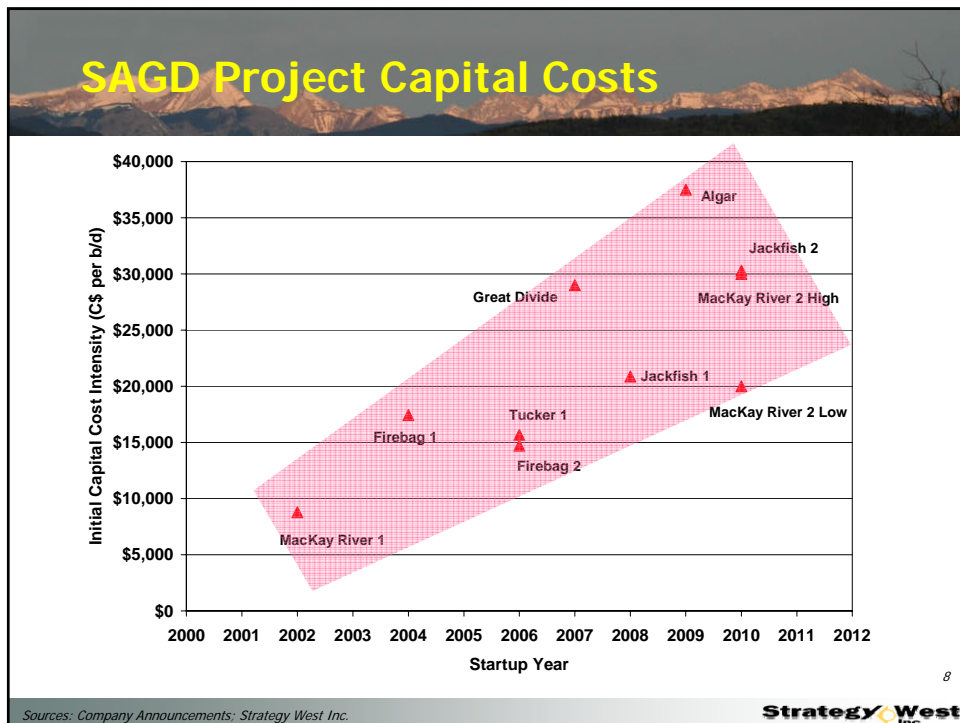
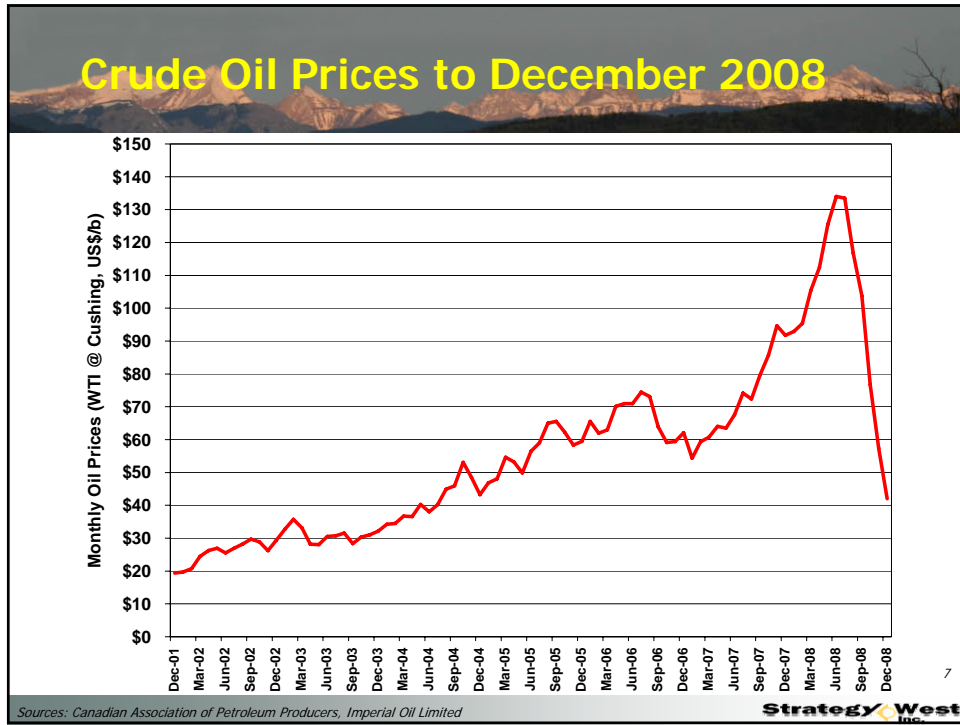
The Current Situation: Oil Sands Industry Challenges

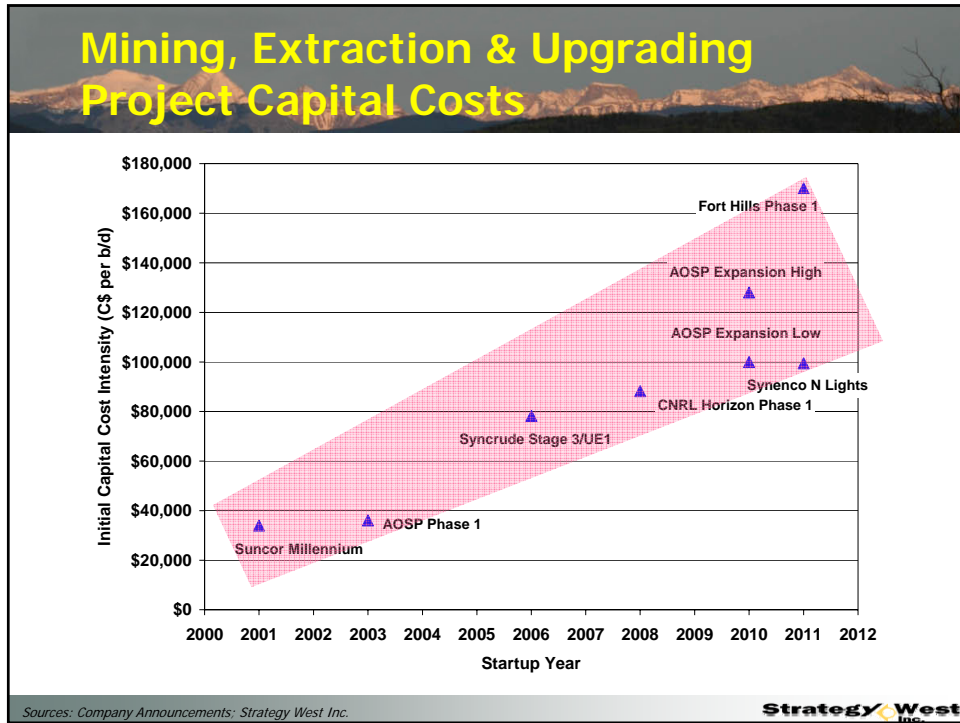
Economic

- Weak Oil Demand and Prices
- Limited Capital Availability
 - Internal
 - External
- High Project Costs and Depressed Project Economics
- Policy and Regulatory Issues

Environmental

- Industry Public Image
 - “Dirty Oil”
- GHG Emission Regulations?
- Water Use
- Tailings Consolidation and Reclamation
- Cumulative Effects





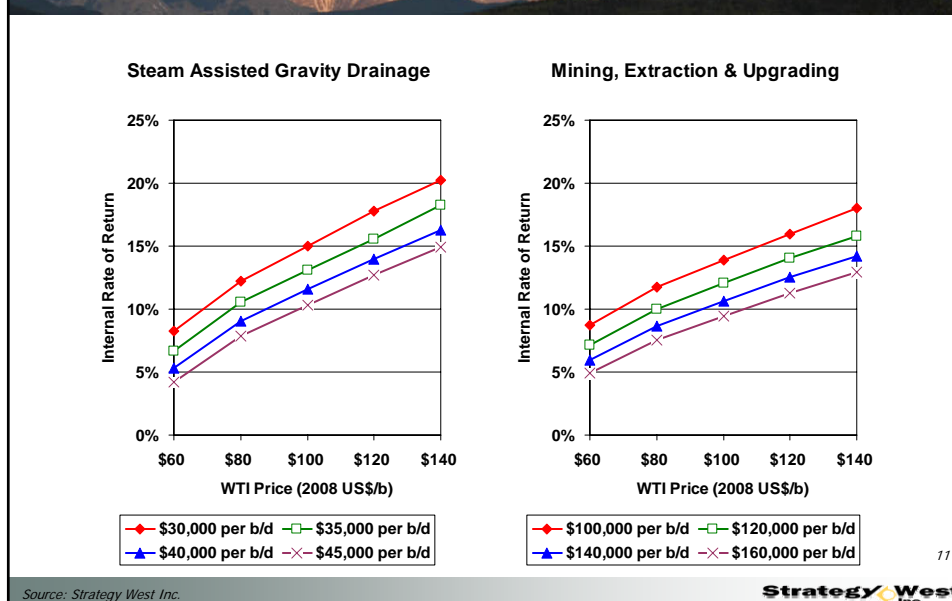
Oil Sands Project Economic Assumptions

	SAGD	Mining, Extraction & Upgrading
Product	Dilbit	Synthetic Crude Oil
Initial Capital Intensity (Real 2008 C\$ per b/d)	\$30,000-\$45,000 (Bitumen)	\$100,000-\$160,000 (SCO)
Non-energy OPEX (Real 2008 C\$/b)	\$10.00	\$20.00
Purchased Natural Gas	1.25 GJ/b (1.18 MMBtu/b)	0.85GJ/b (0.81 MMBtu/b)
SCO Yield	NA	83%
GHG Emission Penalty (\$/t)	\$50	\$50

10

Source: Strategy West Inc.

Oil Sands Project Investment Returns



Economic Implications

- Without a drop in project costs:
 - New SAGD projects require WTI prices of US\$70-80/b for acceptable returns
 - New mining, extraction and upgrading projects require WTI prices of US\$70-100/b for acceptable returns
- However, project costs are expected to drop
 - But how much?

12

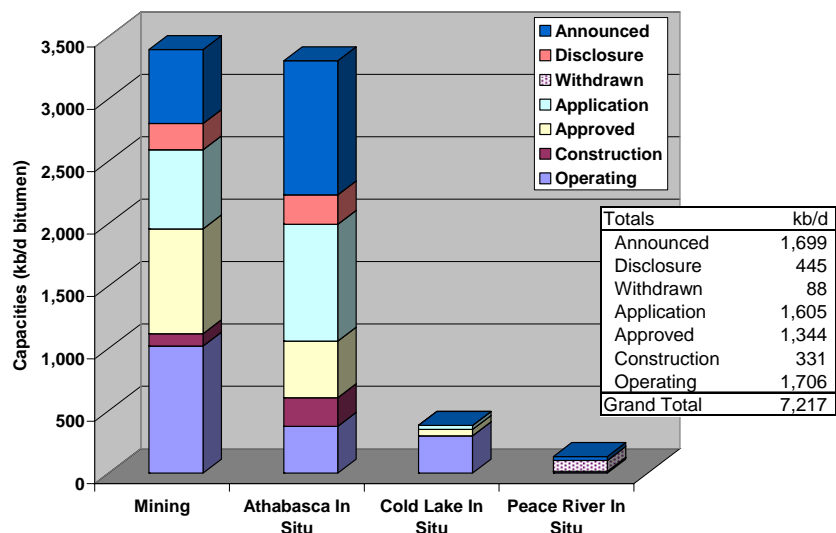
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Strategy West's Oil Sands Industry Outlooks

- Comprehensive Project Database
- Industry Outlooks
 - Project-by-project timing adjustments
 - Project-by-project probabilities
 - Aggregation of results

13

Existing & Proposed Commercial Project Capacities



14

Sources: Operator Applications and Announcements: Strategy West Inc.

Commercial Project Startups During 2008

Integrated Mining

- CNRL Horizon

Integrated in Situ

- Nexen/OPTI Long Lake Phase 1
- Suncor Millennium Coker Unit

In Situ

- CNRL Primrose East
- Devon Jackfish Phase 1
- EnCana Christina Lake Phase 1B
- Shell Orion Phase 1

15

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Commercial Projects Presently Under Construction

Integrated Mining

- AOSP Expansion (2010)
 - Jackpine Mine Phase 1A
 - Scotford 1 Upgrader Expansion

In Situ

- EnCana Foster Creek Phases 1D & 1E (2009)
- MEG Christina Lake Phase 2A (2009)
- StatoilHydro Leismer Demonstration (2009)
- Suncor Firebag Phase 3 (2009)
- EnCana Christina Lake Phase 1C (2010)
- Devon Jackfish Phase 2 (2011)

16

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Partial Listing of Commercial Project Deferrals/Cancellations

Integrated Mining

- CNRL Horizon Phases 2&3
- Fort Hills Phase 1

Upgrading

- BA Energy Heartland
- Northern Lights Sturgeon*
- North West Sturgeon
- StatoilHydro Strathcona*
- Suncor Voyageur
- Total Strathcona

In Situ

- Connacher Algar
- ConocoPhillips Surmont Phase 2
- Petro-Canada Mackay River Expansion
- Shell Carmon Creek*
- Suncor Firebag Phases 4-6

Integrated in Situ

- Nexen/OPTI Long Lake Phase 2

*Applications Withdrawn

17

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After the Crash: Two Scenarios

Prolonged Downturn

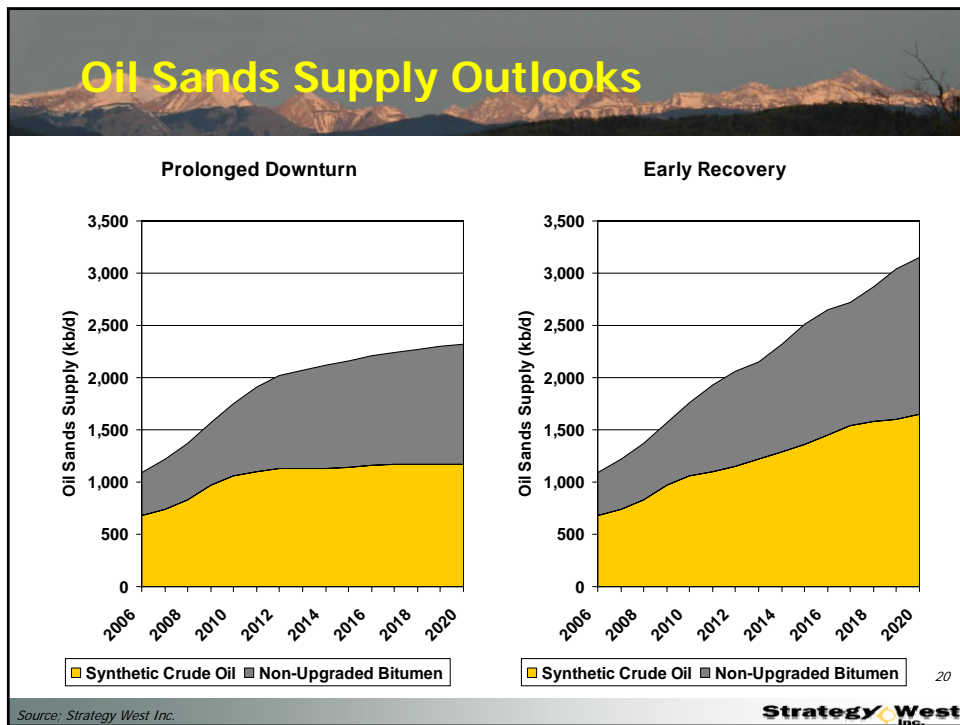
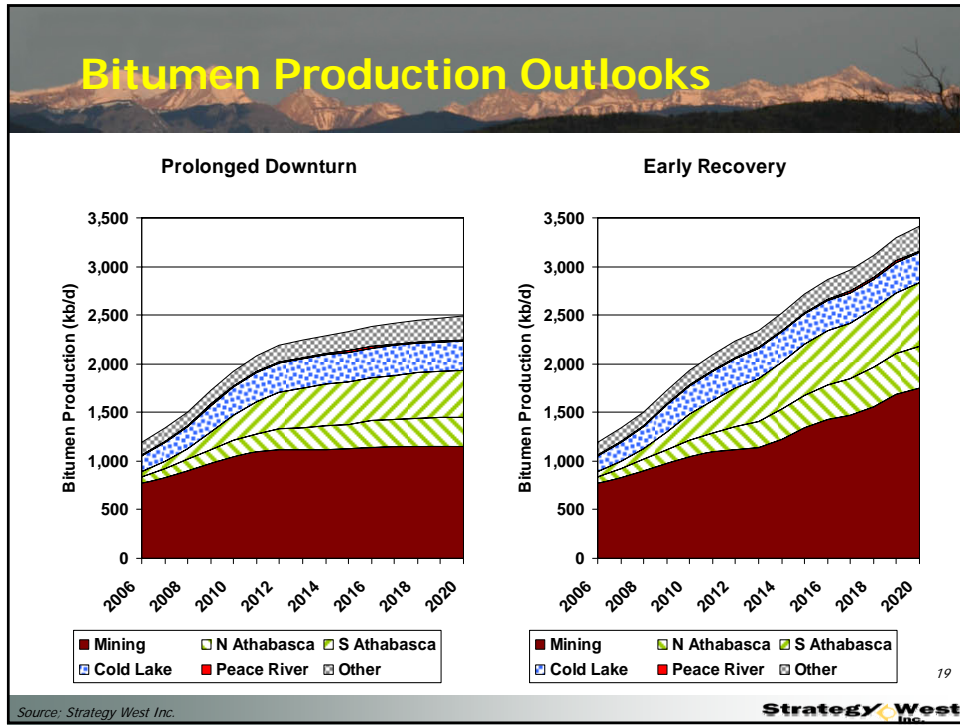
- Projects under construction are completed
- No near-term economic recovery
- Slow growth after recovery led almost exclusively by established industry players
- No investment in new upgrading capacity

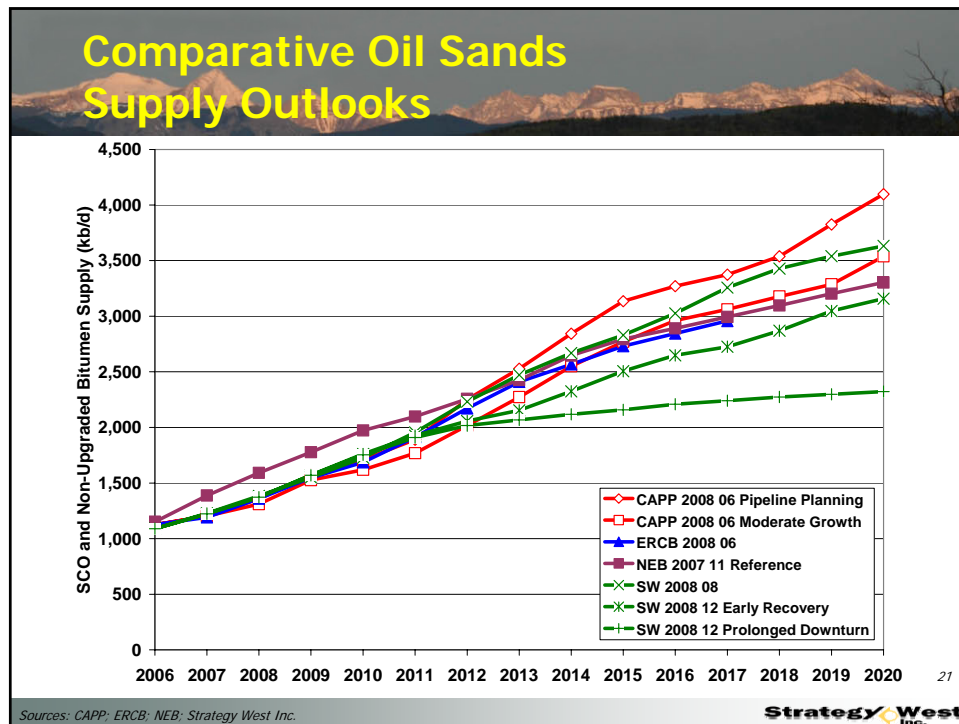
Early Recovery

- Projects under construction are completed
- Economic recovery by year-end 2009
- Moderate growth after recovery led mainly by established industry players
- Investment in new upgrading capacity

18

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Conclusions

- The current economic/financial crisis has caused project deferrals and cancellations
- Projects under construction will increase oil sands industry supply to about 2 million b/d by early next decade
- At current costs, the oil sands industry needs WTI oil prices of US\$70-100/b (real 2008) to justify new investments
- Industry growth will resume after global economic recovery; however, the rate will depend upon oil prices and resolution of policy, environmental and regulatory issues

22

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Thank You

Questions?

Please visit
www.strategywest.com for oil
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detailed oil sands industry
information

23

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