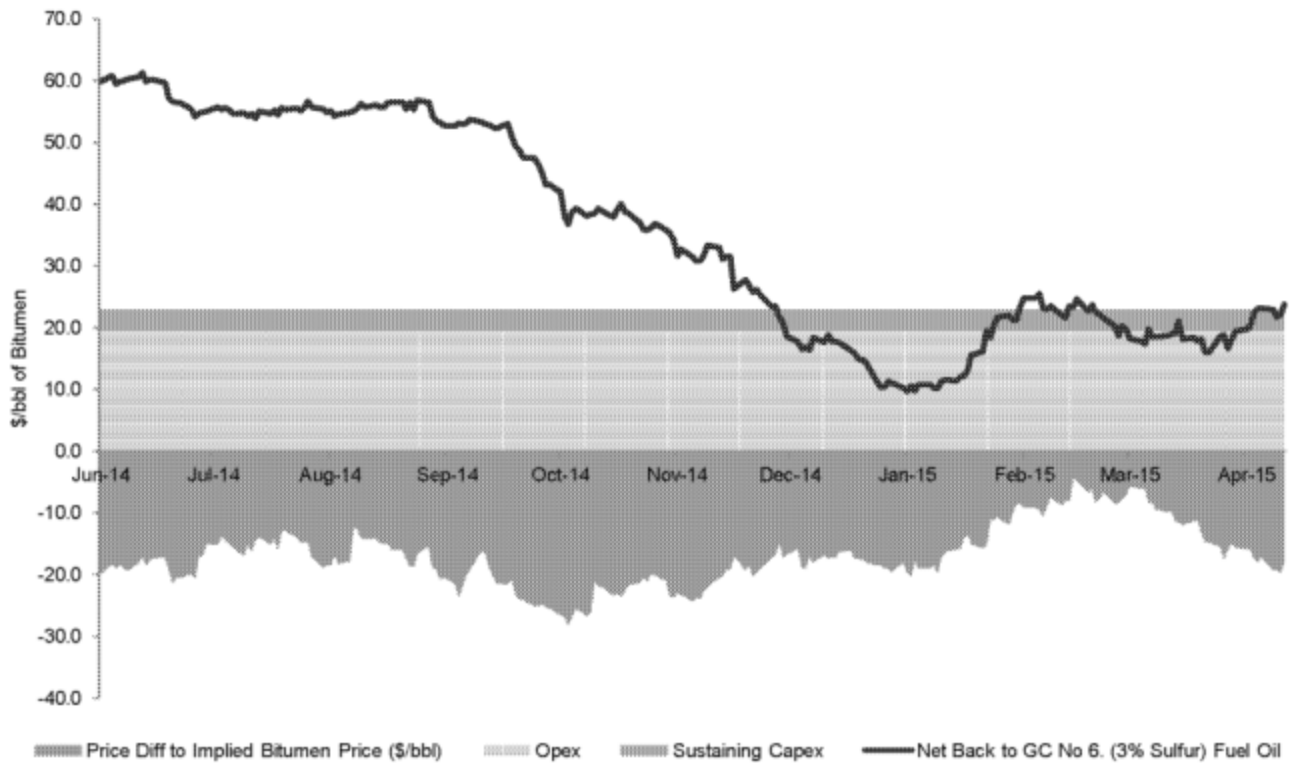




Figure 81: Though the recent recovery and narrowing of WTI-WCS has increased rail netbacks for Canadian heavies to the Gulf Coast, rail economics remain 'heavily' challenged



Source: Deutsche Bank, Wood Mackenzie, Bloomberg, assumes 20% diluents penalty, costs shown represent an average of major SAGD projects/fields

Figure 82: Key Growth Projects, 2014-2020

Project	IEA Region	Country	Sector	Operator	Project Type	Dev Status	API	Prod Start Up Yr	Peak Prod Yr	2014-2017 Prod	2014-2020 Prod
Kearl	North America	Canada	Athabasca	Imperial Oil	Onshore	Onstream	8	2013	2030	138	148
Sumont Project	North America	Canada	Athabasca	ConocoPhillips	Onshore	Onstream	N/A	2007	2018	95	109
Horizon Project	North America	Canada	Athabasca	Canadian Natural Resources	Onshore	Onstream	34	2008	2019	89	165
Foster Creek	North America	Canada	Athabasca	Cenovus Energy	Onshore	Onstream	11	2001	2029	81	121
AOSP	North America	Canada	Athabasca	Shell	Onshore	Onstream	34	2003	2021	68	96
Sunrise	North America	Canada	Athabasca	Husky Energy	Onshore	Onstream	8	2015	2025	60	60
Christina Lake Project	North America	Canada	Athabasca	ConocoPhillips	Onshore	Onstream	9	2002	2025	51	126
Hibernia S subsea PL1001	North America	Canada	Newfoundland	HMDC	Shallow	Onstream	36	2011	2017	51	28
MEG Christina Lake	North America	Canada	Athabasca	MEG Energy	Onshore	Onstream	9	2008	2026	47	69
Jackfish	North America	Canada	Athabasca	Devon Energy	Onshore	Onstream	8	2007	2029	41	41

Source: Deutsche Bank, Wood Mackenzie