

**Capital Region New Upgrader-Related Property Tax
Revenue Estimates**

Alberta Municipal Affairs & Housing
Local Government Services
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Introduction

The single biggest driver of the anticipated growth in the Capital Region over the next few decades is the heavy industrial development proposed for the area known as Alberta's Industrial Heartland. This area, located northeast of the City of Edmonton, is made up of parts of four municipalities: the Counties of Strathcona, Sturgeon and Lamont, and the City of Fort Saskatchewan. It is estimated that between approximately \$40 and \$88 billion will be invested in the Capital Region related to bitumen upgrader projects over the next two decades. These estimates consider all the projects that have been disclosed by oil companies, are receiving approvals from various authorities, or are already under construction.

There has been considerable interest expressed in estimating the total potential revenue stream of all municipalities within the Capital Region given the anticipated direct and indirect development associated with the upgrader projects as well as the anticipated population growth throughout the region. However, once we move away from the direct property taxes attributable to individual major projects there is no model currently available to us which would allow for a sound correlation between population and employment growth on one hand, and growth in municipal property taxation and other revenue for individual municipalities on the other hand.

Commercial and industrial projects are the property categories that usually contribute more to municipal revenues than what they cost in terms of municipal services and municipal infrastructure. It should be noted that this is not always the case, as the net municipal revenue benefits of commercial facilities with major traffic impacts can be quite limited. Residential developments generally cost municipalities more than they provide in revenues. This means that the major growth in new residential property assessment (estimated at \$60 billion over the next 35 years) expected in the Capital Region is less significant to municipal finances than the raw number implies.

There are other significant industrial and commercial projects planned in the Capital Region, but the value of major projects in these categories reported in the population and employment forecasts (Appendix A of the Capital Region Infrastructure Review) is under \$5 billion in total (and under \$4 billion in assessed value). This amount is much more modest than the value of the anticipated upgrader projects, and omitting these commercial and industrial projects should have a limited impact on estimates of municipal revenue.

Municipal Revenue

The scope of this report is limited to the property tax revenues flowing from upgrader projects that have been disclosed, are approved or are already under construction (as of Fall 2007), and that are located in or near the Alberta's Industrial Heartland Region. Except for the Petro-Canada refinery conversion, these projects are all located in eastern Sturgeon County and northern Strathcona County, which means that only Sturgeon and Strathcona County will receive any direct property tax revenue from the proposed upgraders. Due to the magnitude of the upgrader projects, property tax revenue related to these proposed developments represents the largest single component of property tax growth occurring in the Capital Region.

Under current legislation (the *Municipal Government Act*) property taxes cannot be levied on buildings, machinery, or equipment used for manufacturing or processing until the facility is completed. This means that the vast majority of property tax revenue associated with an upgrader will not be received by the municipality where it is located until after project completion. Revenue sources outside of property taxes are anticipated to be modest and will at best cover the direct infrastructure and services required by the upgraders which do not require major front-end investments. If major facilities, such as those associated with the provision and/or treatment of process water, were to be funded by municipal authorities rather than the upgrader's owners, the municipalities involved would have to borrow against future property tax or utility revenues to ensure their timely construction.

The experience of many municipal jurisdictions with large scale industrial development, not just the Regional Municipality of Wood Buffalo, is that much of the municipal services and infrastructure required for the workforce and their families must be supplied prior to the municipality receiving any significant financial benefits from the project. This often creates major financial issues and can even create long-term financial hardships for some municipalities after the industrial facility is in operation. This situation is especially true if the workforce lives in one jurisdiction and the industrial facility is in another.

Methodology

Listed below are the assumptions used in calculating the anticipated annual property tax revenues from new upgraders.

- 1) **Upgraders were treated as if they consist entirely of manufacturing and processing machinery and equipment (M&E).** Treating an upgrader as if it were entirely assessed as M&E provides a reasonable estimate of the property tax revenue an upgrader will generate once it is operating and subject to property taxation.

- 2) **Upgraders were treated as if 45% of the reported capital cost will be assessable for property tax purposes.** It should be noted that this ratio is higher than in the Regional Municipality of Wood Buffalo based on the percentage of non-assessable components laid out in the Construction Cost Reporting Guide. The exception is the Petro-Canada Strathcona Refinery conversion, which is only 20% assessable because it is a conversion and not a new project or expansion.
- 3) **The proposed upgraders are completed in the time lines and for the costs indicated in the source project listings.** Revenue forecasts are very sensitive to factors such as construction costs, new project announcements, and project delays or cancellations. The leading drivers of revenue increases would be construction costs rising (more likely in the short term) and the announcement of more facilities or expansions in the future (more likely in the longer term). The leading drivers of revenue decreases would be the cancellation or delay of projects. This could happen at any time.
- 4) **Municipalities continue to use their respective 2007¹ property tax rates.** It is unknown what property tax rates will be applied by municipalities in the future, so for the purposes of this exercise they are held constant at 2007 rates. Needless to say, revenue forecasts are sensitive to any changes in tax rates.
- 5) **Projects will be assessable and begin generating property tax revenue in the tax year following construction completion.** Under existing legislation no property assessment can be prepared for a manufacturing and processing facility while it is under construction. Thus, proposed upgrader projects are assumed to be completed in one year and assessed and taxed for property taxation purposes in the following year. The dates used to arrive at the estimates are found referenced by scenario.
- 6) **Revenues presented are in 2007 dollars and will not decline due to depreciation.** The constant dollar property tax revenues from the upgraders will decline unless future expenditures compensate for depreciation, but continuing expenditures to improve the efficiency, reliability, and output of these upgraders is expected.

Project Scenarios

It should be noted that there is conflicting information available in the public domain regarding projects planned for the Capital Region. Some projects listed in the Alberta Inventory of Major Projects, in papers such as Strategy West's "Existing and Proposed Canadian Commercial Oil Sands Projects," or on

¹ Sturgeon County Tax Rate = 8.3422 (includes municipal tax rate only); Strathcona County Tax Rate = 8.0539 (includes municipal tax rate-7.7356 & library requisition-0.3183)

individual company websites were not included in the Capital Region Infrastructure Review. There are also inconsistencies between the upgrader projects listed in the main portion of the report titled *Capital Region Integrated Growth Management Plan: Interim Report on Land Use (September 27, 2007)* and upgrader projects listed by municipality in Appendix A (Population and Employment Forecasts) of the same report. As well, two other project listings - *Alberta's Inventory of Major Projects (August 2007)* and the draft report by Nichols Applied Management entitled *Upgrader Developments in Alberta's Industrial Heartland: Workforce and Population Impacts* - were also used in preparing this report.

There are legitimate disagreements regarding project timing, so tying all the analysis to one particular scenario would not be prudent. Four different scenarios are presented in the following tables. Results for each scenario vary considerably depending on the project list used to generate the calculations for each scenario.

Two tables depicting the upgrader-related property tax revenue calculations have been prepared for each scenario. The first set of tables, located in the body of the report, represents property tax revenues that would flow to the municipalities from the projects included in the scenario and the associated timing of that property tax revenue. This includes a running total of new upgrader-related annual property tax revenue. The second set of tables, representing the upgrader-related projects, taxable assessment and associated timing for these projects in Strathcona and Sturgeon counties, is located in Appendix A. These calculations highlight the sensitivity of future property tax revenue to both the number of upgraders and their associated timing.

Scenario 1²:

The first scenario calculates property tax revenue from upgrader projects listed in the annotated project listings contained on pages 50, 65 and 66 of Appendix A, "Capital Region Infrastructure Review: Population and Employment Forecasts," of the ISL report *Capital Region Integrated Growth Management Plan: Interim Report on Land Use*.

The first scenario includes 13 phases of various projects with capital costs of \$36 billion. Table 1 outlines that the calculated additional property tax revenues (in 2007 dollars) to Sturgeon County and Strathcona County total \$128.62 million. Strathcona County could see potential additional revenue of \$79 million, with Sturgeon County potentially seeing \$50 million in new tax revenue. The potential

² According to other sources such as company websites and Strategy West's paper, projects listed with unknown scheduled start ups (TBD) in the Inventory of Major Projects could be assumed to start up within 10 years. For instance, according to BA Energy's website, Heartland Upgrader Phases 2 and 3 are suggested for start up in 2010 and 2012 respectively.

peak year for new tax revenue for Strathcona County is 2015 (\$23 million) for the year after Phase 2 of both Statoil and Total's upgraders start up. In Sturgeon County, the Fort Hills Project starting up in 2011 will potentially add over \$26 million in new tax revenue in 2012.

Table 1

Estimated Annual Property Tax Revenue New Upgraders Capital Region - Scenario 1					
Year of Revenue	On-stream Amount (Millions) **	Cumulative Total (Millions) **	On-stream Amount (Millions) **	Cumulative Total (Millions) **	Cumulative Total (Millions) **
	Strathcona County		Sturgeon County		Capital Region
2009	\$ 5.84	\$ 5.84	\$ -	\$ -	\$ 5.84
2010	\$ -	\$ 5.84	\$ 10.89	\$ 10.89	\$ 16.73
2011	\$ 20.30	\$ 26.14	\$ -	\$ 10.89	\$ 37.03
2012	\$ -	\$ 26.14	\$ 26.28	\$ 37.17	\$ 63.31
2013	\$ 13.59	\$ 39.73	\$ -	\$ 37.17	\$ 76.90
2014	\$ 9.06	\$ 48.79	\$ -	\$ 37.17	\$ 85.96
2015	\$ 22.65	\$ 71.44	\$ -	\$ 37.17	\$ 108.61
2016	\$ -	\$ 71.44	\$ 12.76	\$ 49.93	\$ 121.37
2017	\$ -	\$ 71.44	\$ -	\$ 49.93	\$ 121.37
TBD***	\$ 7.25	\$ 78.69	\$ -	\$ 49.93	\$ 128.62

**2007 dollars

Strathcona Tax Rate = 8.0539 (includes municipal tax rate-7.7356 & library requisition-0.3183)

Sturgeon Tax Rate = 8.3422 (includes municipal tax rate only)

***TBD = Date to be determined

Scenario 2

Scenario 2 consists of revenue calculations which reflect the upgrader projects listed in Figure 2, Section 3 of the ISL report *Capital Region Integrated Growth Management Plan: Interim Report on Land Use*. Capital costs were not presented in the aforementioned figure, so these capital costs were taken from the "Inventory of Major Projects" (August 2007). The list in Figure 2 includes the Synenco Energy Inc. upgrader. In May 2007 this project was placed "On Hold" by the company, so the capital costs have been removed and the property tax revenue that would have been generated by this project is not included in the calculations presented. The list in Figure 2 also includes a proposed Suncor upgrader, but a site has not been chosen and cost and timing estimates are unknown, so it has been excluded from this analysis.

The 17 phases of several upgrader projects in Scenario 2 have capital costs adding up to almost \$48 billion over 13 years. The additional upgrader revenue increase over Scenario 1 will flow to Sturgeon County. The additional property

tax revenues (in 2007 dollars) to Sturgeon County and Strathcona County are calculated to be \$173.30 million annually by the end of 2021.

As seen in Table 2, Strathcona County could see potential additional annual property tax revenue of \$79 million, with Sturgeon County potentially seeing as much as \$95 million in new annual property tax revenue. The peak year for new tax revenue for Strathcona County is 2011 (\$24 million) for the year after the Scotford Upgrader 1 expansion is complete and Phase 2 of BA Energy's Heartland upgrader starts up. In Sturgeon County, the Fort Hills Project starting up in 2011 will potentially add over \$26 million in new tax revenue in 2012. Further Fort Hills revenues will flow in 2016.

Table 2

Expected Annual Tax Revenue New Upgraders Capital Region – Scenario 2					
Year of Revenue	On-stream Amount (Millions) **	Cumulative Total (Millions) **	On-stream Amount (Millions) **	Cumulative Total (Millions) **	Cumulative Total (Millions) **
	Strathcona County		Sturgeon County		Capital Region
2009	\$ 3.26	\$ 3.26	\$ -	\$ -	\$ 3.26
2010	\$ 2.58	\$ 5.84	\$ -	\$ -	\$ 5.84
2011	\$ 23.92	\$ 29.76	\$ 10.89	\$ 10.89	\$ 40.65
2012	\$ 9.06	\$ 38.82	\$ 26.28	\$ 37.17	\$ 75.99
2013	\$ 17.22	\$ 56.04	\$ 6.01	\$ 43.18	\$ 99.22
2014	\$ -	\$ 56.04	\$ -	\$ 43.18	\$ 99.22
2015	\$ 13.59	\$ 69.63	\$ -	\$ 43.18	\$ 112.81
2016	\$ -	\$ 69.63	\$ 51.43	\$ 94.61	\$ 164.24
2017	\$ -	\$ 69.63	\$ -	\$ 94.61	\$ 164.24
2018	\$ -	\$ 69.63	\$ -	\$ 94.61	\$ 164.24
2019	\$ -	\$ 69.63	\$ -	\$ 94.61	\$ 164.24
2020	\$ -	\$ 69.63	\$ -	\$ 94.61	\$ 164.24
2021	\$ 9.06	\$ 78.69	\$ -	\$ 94.61	\$ 173.30

**2007 dollars

Strathcona Tax Rate = 8.0539 (includes municipal tax rate-7.7356 & library requisition-0.3183)

Sturgeon Tax Rate = 8.3422 (includes municipal tax rate only)

***TBD = Date to be determined

Scenario 3³:

³ According to other sources such as company websites and Strategy West's paper, projects listed with unknown scheduled start ups (TBD) in the Inventory of Major Projects could be assumed to start up within 10 years. For instance, according to BA Energy's website, Heartland Upgrader Phases 2 and 3 are suggested for start up in 2010 and 2012 respectively.

A third listing is presented which represents all upgrader projects listed in the “Inventory of Major Projects” (August 2007) from Alberta Employment, Immigration and Industry. This list is the base for Scenario 3 and includes over \$69 billion in capital projects over ten years.

Table 3

Expected Annual Tax Revenue New Upgraders Capital Region – Scenario 3					
Year of Revenue	On-stream Amount (Millions) **	Cumulative Total**	On-stream Amount (Millions) **	Cumulative Total**	Cumulative Total (Millions) **
	Strathcona County		Sturgeon County		Capital Region
2009	\$ 5.84	\$ 5.84	\$ -	\$ -	\$ 5.84
2010	\$ -	\$ 5.84	\$ -	\$ -	\$ 5.84
2011	\$ 20.30	\$ 26.14	\$ 10.89	\$ 10.89	\$ 37.03
2012	\$ -	\$ 26.14	\$ 26.28	\$ 37.17	\$ 63.31
2013	\$ 93.32	\$ 119.46	\$ -	\$ 37.17	\$ 156.63
2014	\$ -	\$ 119.46	\$ -	\$ 37.17	\$ 156.63
2015	\$ 31.71	\$ 151.17	\$ -	\$ 37.17	\$ 188.34
2016	\$ -	\$ 151.17	\$ 57.44	\$ 94.61	\$ 245.78
2017	\$ -	\$ 151.17	\$ -	\$ 94.61	\$ 245.78
TBD***	\$ 7.25	\$ 158.42	\$ -	\$ 94.61	\$ 253.03

**2007 dollars

Strathcona Tax Rate = 8.0539 (includes municipal tax rate-7.7356 & library requisition-0.3183)

Sturgeon Tax Rate = 8.3422 (includes municipal tax rate only)

***TBD = Date to be determined

The entire list of upgrader projects from the “Inventory of Major Projects” includes 19 phases with capital costs of almost \$77 billion⁴. The calculated additional annual property tax revenues (in 2007 dollars) to Sturgeon County and Strathcona County are \$253 million (Strathcona County about \$158 million, Sturgeon County approximately \$95 million). The peak year for new tax revenue for Strathcona County is 2013 (\$93 million) for the year after Phase 1 of Statoil and Phases 1 to 4 of Scotford Upgrader II start up. In Sturgeon County, the Fort Hills Project phases 2 and 3 and the North West Upgrader phases 2 and 3 starting up in 2015 will potentially add over \$57 million in new tax revenue in 2016.

The entire difference in revenues between Scenario 2 and Scenario 3 goes to Strathcona County.

Scenario 4:

⁴ It should be noted that \$7 billion of the Fort Hills Phase I project is attributable to development taking place in the Regional Municipality of Wood Buffalo.

The draft report by Nichols Applied Management entitled “Upgrader Developments in Alberta’s Industrial Heartland: Workforce and Population Impacts” provides yet another possible scenario for calculating potential upgrader- related property taxes. This list includes almost \$88 billion in upgrader capital investments over the next 15 years.

Under this scenario Strathcona County could potentially collect an additional \$218 million annually in new upgrader-related property tax revenue, while Sturgeon County could see upwards of \$99 million in annual revenue by 2017. The peak year of new annual revenue under this scenario for Strathcona County is 2014, with over \$65 million coming online. The peak new revenue year for Sturgeon County would be 2012 (with \$38 million in new annual property tax revenue) under this scenario. Under this fourth scenario Strathcona County receives a larger share of the new annual upgrader-related revenue compared to the previous scenarios.

Table 4

Expected Annual Tax Revenue New Upgraders Capital Region – Scenario 4					
Year of Revenue	On-stream Amount (Millions) **	Cumulative Total**	On-stream Amount (Millions) **	Cumulative Total**	Cumulative Total (Millions) **
	Strathcona County		Sturgeon County		Capital Region
2009	\$ 6.48	\$ 6.48	\$ -	\$ --	\$ 6.48
2010	\$ 20.30	\$ 26.78	\$ -	\$ --	\$ 26.78
2011	\$ 3.62	\$ 30.40	\$ 10.89	\$ 10.89	\$ 41.29
2012	\$ -	\$ 30.40	\$ 38.10	\$ 48.99	\$ 79.39
2013	\$ 3.62	\$ 34.02	\$ -	\$ 48.99	\$ 83.01
2014	\$ 65.41	\$ 99.43	\$ 17.84	\$ 66.83	\$ 166.26
2015	\$ -	\$ 99.43	\$ -	\$ 66.83	\$ 166.26
2016	\$ -	\$ 99.43	\$ 26.28	\$ 93.11	\$ 192.54
2017	\$ 27.00	\$ 126.43	\$ 6.01	\$ 99.12	\$ 225.55
2018	\$ 43.85	\$ 170.28	\$ -	\$ 99.12	\$ 269.40
2019	\$ -	\$ 170.28	\$ -	\$ 99.12	\$ 269.40
2020	\$ 21.56	\$ 191.84	\$ -	\$ 99.12	\$ 290.96
2021	\$ -	\$ 191.84	\$ -	\$ 99.12	\$ 290.96
2022	\$ -	\$ 191.84	\$ -	\$ 99.12	\$ 290.96
2023	\$ 27.00	\$ 218.84	\$ -	\$ 99.12	\$ 317.96
2024	\$ -	\$ 218.84	\$ -	\$ 99.12	\$ 317.96

**2007 dollars

Strathcona Tax Rate = 8.0539 (includes municipal tax rate-7.7356 & library requisition-0.3183)

Sturgeon Tax Rate = 8.3422 (includes municipal tax rate only)

***TBD = Date to be determined

Findings⁵

Between 2008 and 2022, the estimated capital spending on upgrader conversions, expansions and new projects varies between \$36 billion (Scenario 1) and \$88 billion (Scenario 4). This translates into a potential annual upgrader-related property tax revenue of anywhere from \$129 million to \$318 million a year by 2023. The large variance in potential annual property tax revenue between scenarios indicates the sensitivity of revenue flows to project assumptions.

Long Term Outlook

The following chart summarizes the cumulative property tax revenue totals for the new upgrader projects for Strathcona and Sturgeon counties. Scenarios 1 and 3 have projects with dates yet to be determined according to the “Inventory of Major Projects.” Company websites suggest that these projects are tentatively scheduled for start up in 2010 and 2012. Therefore, the revenues from the TBD listed projects are included in the 10 year category.

Table 5

Scenario	New Upgrader Property Tax Revenue (million)			
	1	2	3	4
Strathcona County – 10 Years (2017)	\$ 78.69	\$ 69.63	\$ 158.42	\$ 126.43
Sturgeon County – 10 Years (2017)	\$ 49.93	\$ 94.61	\$ 94.61	\$ 99.12
Strathcona County – 35 Years (2042)	\$ 78.69	\$ 78.69	\$ 158.42	\$ 218.84
Sturgeon County – 35 Years (2042)	\$ 49.93	\$ 94.61	\$ 94.61	\$ 99.12

Scenario 4 should be used for long term planning purposes even though it represents the upper-end forecast of municipal property tax revenues and could lead to an optimistic view of the revenues available for local and regional requirements. This is because Scenario 4 uses the same assumptions as were used to develop the Capital Region population projections, and it would not be appropriate to use one development scenario to forecast costs and another to forecast revenues.

Nevertheless, it should be noted that a more cautious estimate of property tax revenues could be considered, such as a revenue estimate that reaches approximately \$175 million annually in the long term (the amount in Scenario 2). This would be our suggestion for a conservative estimate, as long as it is accompanied by a consistently reduced forecast of costs derived from the same development scenario.

⁵ All summary statistics are based on the assumptions listed in the methodology section.

Significance of Upgrader-Related Revenue Growth

In 2006⁶ the twenty-five Capital Region municipalities levied total property taxes of approximately \$1.2 billion on a total taxable assessment of \$102 billion. Two thirds of that amount (\$800 million) was allocated to municipal purposes and the balance (\$400 million) was used for education and other requisitions. To put this in context, under Scenario 4 the projected increase in upgrader-related property taxes is estimated to be \$318 million by the year 2024. This would be 40% of the 2006 property tax revenues collected for municipal purposes in the entire Capital Region.

These estimates understate the significance of the upgraders because, as discussed earlier in the report, large industrial projects are one of the few assessment categories where related revenues will greatly exceed the cost of providing municipal services. The impact of related industries that will be established to support the upgraders is also not considered.

General industrial property assessment can be broadly defined to include industrial land and building, linear property (e.g. pipelines, power generation and distribution systems) and machinery and equipment assessment. In 2006 these combined assessment categories generated property tax revenue of approximately \$264 million in the Capital Region. The anticipated Scenario 4 upgrader-related property tax revenues (\$318 million by 2024) will overshadow this amount.

⁶ The most recent available financial data for municipalities in the Capital Region is the fiscal year 2006.

Appendix A

Tables of Upgrader Projects for Each Scenario

Scenario 1

Company Name	Project Name	Location	Phase	Scheduled Start-up	Capital Expenditure (Millions)	Assessed Value (Millions)	Increased property tax revenues in 2007 dollars
Petro-Canada	Strathcona Refinery Conversion	Strathcona County	Only	2008	\$ 1,600	\$ 320	\$2.58
BA Energy	Heartland	Strathcona County	Phase 1	2008	\$ 900	\$ 405	\$3.26
Total Capital Region 2008					\$ 2,500	\$ 725	\$5.84
North West Upgrading	North West Upgrading	Sturgeon County	Phase 1	2009	\$ 2,900	\$ 1,305	\$10.89
Total Capital Region 2009					\$ 2,900	\$ 1,305	\$10.89
Albian Sands Energy Ltd.	Scotford Upgrader I Expansion	Strathcona County	Expansion 1	2010	\$ 5,600	\$ 2,520	\$20.30
Total Capital Region 2010					\$ 5,600	\$ 2,520	\$20.30
Fort Hills Energy Corp. / Petro Canada	Fort Hills Project	Sturgeon County	Phase 1	2011	\$ 7,000	\$ 3,150	\$26.28
Total Capital Region 2011					\$ 7,000	\$ 3,150	\$26.28
Statoil	Bitumen Upgrader	Strathcona County	Phase 1	2012	\$ 3,750	\$ 1,688	\$13.59
Total Capital Region 2012					\$ 3,750	\$ 1,688	\$13.59
Total	Strathcona	Strathcona County	Phase 1	2013	\$ 2,500	\$ 1,125	\$9.06
Total Capital Region 2013					\$ 2,500	\$ 1,125	\$9.06
Statoil	Bitumen Upgrader	Strathcona County	Phase 2	2014	\$ 3,750	\$ 1,688	\$13.59
Total E&P Canada	Strathcona	Strathcona County	Phase 2	2014	\$ 2,500	\$ 1,125	\$9.06
Total Capital Region 2014					\$ 6,250	\$ 2,813	\$22.65
North West Upgrading	North West Upgrading	Sturgeon County	Phase 2	2015	\$ 1,600	\$ 720	\$6.01
North West Upgrading	North West Upgrading	Sturgeon County	Phase 3	2015	\$ 1,800	\$ 810	\$6.76
Total Capital Region 2015					\$ 3,400	\$ 1,530	\$12.76
BA Energy	Heartland	Strathcona County	Phase 2	TBD	\$ 1,000	\$ 450	\$3.62
BA Energy	Heartland	Strathcona County	Phase 3	TBD	\$ 1,000	\$ 450	\$3.62
Total Capital Region TBD***					\$ 2,000	\$ 900	\$7.25
Total All Projects Capital Region					\$ 35,900	\$ 15,755	\$128.62

This listing is found in the *Capital Region Integrated Growth Management Plan, Interim Report on Land Use*, Appendix A pages 50, 65 and 66.

Strathcona Tax Rate 8.0539

Sturgeon Tax Rate 8.3422

*** TBD - Date To Be Determined

Scenario 2

Company Name	Project Name	Location	Phase	Scheduled Start-Up	Capital Expenditure (Millions)	Assessed Value (Millions)	Increased property tax revenues in 2007 dollars
BA Energy	Heartland	Strathcona County	Phase 1	2008	\$ 900	\$ 405	\$ 3.26
Total Capital Region 2008					\$ 900	\$ 405	\$ 3.26
Petro Canada	Strathcona Refinery Conversion	Strathcona County	N/A	2009	\$ 1,600	\$ 320	\$ 2.58
Total Capital Region 2009					\$ 1,600	\$ 320	\$ 2.58
Albian Sands Energy Corp.	Scotford Upgrader I Expansion	Strathcona County	Expansion 1	2010	\$ 5,600	\$ 2,520	\$ 20.30
BA Energy	Heartland	Strathcona County	Phase 2	2010	\$ 1,000	\$ 450	\$ 3.62
North West Upgrading	North West Upgrading	Sturgeon County	Phase 1	2010	\$ 2,900	\$ 1,305	\$ 10.89
Total Capital Region 2010					\$ 9,500	\$ 4,275	\$ 34.81
Synenco	Northern Lights	Sturgeon County	Phase 1	ON HOLD	\$ -	\$ -	\$ -
Total E&P Canada	Strathcona	Strathcona County	Phase 1	2011	\$ 2,500	\$ 1,125	\$ 9.06
Fort Hills Energy Corp. / Petro Canada	Fort Hills Project	Sturgeon County	Phase 1	2011	\$ 7,000	\$ 3,150	\$ 26.28
Total Capital Region 2011					\$ 9,500	\$ 4,275	\$ 35.34
Synenco	Northern Lights	Sturgeon County	Phase 2	ON HOLD	\$ -	\$ -	\$ -
Statoil (NAOSC)	Bitumen Upgrader	Strathcona County	Phase 1	2012	\$ 3,750	\$ 1,688	\$ 13.59
BA Energy	Heartland	Strathcona County	Phase 3	2012	\$ 1,000	\$ 450	\$ 3.62
North West Upgrading	North West Upgrading	Sturgeon County	Phase 2	2012	\$ 1,600	\$ 720	\$ 6.01
Total Capital Region 2012					\$ 6,350	\$ 2,858	\$ 23.22
Statoil (NAOSC)	Bitumen Upgrader	Strathcona County		2014	\$ 3,750	\$ 1,688	\$ 13.59
Total Capital Region 2014					\$ 3,750	\$ 1,688	\$ 13.59
Fort Hills Energy Corp. / Petro Canada	Fort Hills Project	Sturgeon County	Phase 2	2015	\$ 6,050	\$ 2,723	\$ 22.71
Fort Hills Energy Corp. / Petro Canada	Fort Hills Project	Sturgeon County	Phase 3	2015	\$ 6,050	\$ 2,723	\$ 22.71
North West Upgrading	North West Upgrading	Sturgeon County	Phase 3	2015	\$ 1,600	\$ 720	\$ 6.01
Total Capital Region 2015					\$ 13,700	\$ 6,165	\$ 51.43
Total E&P Canada	Strathcona	Strathcona County	Phase 2	2020	\$ 2,500	\$ 1,125	\$ 9.06
Total Capital Region 2020					\$ 2,500	\$ 1,125	\$ 9.06
Total All projects Capital Region					\$ 47,8000	\$ 21,110	\$ 173.30

This Listing is found in the *Capital Region Integrated Growth Management Plan, Interim Report on Land Use*, Figure 2, Section 3.

Strathcona Tax Rate 8.0539

Sturgeon Tax Rate 8.3422

Scenario 3

Company Name	Project Name	Location	Phase	Scheduled Start-Up	Capital Expenditure (Millions)	Assessed Value (Millions)	Increased Property Tax Revenue in 2007 dollars*
BA Energy	Heartland	Strathcona County	Phase 1	2008	\$ 900	\$ 405	\$ 3.26
Petro-Canada	Strathcona Refinery Conversion	Strathcona County	Only	2008	\$ 1,600	\$ 320	\$ 2.58
Total Capital Region 2008					\$ 2,500	\$ 725	\$ 5.84
Albian Sands Energy Ltd.	Scotford Upgrader I Expansion	Strathcona County	Expansion 1	2010	\$ 5,600	\$ 2,520	\$ 20.30
North West Upgrading	North West Upgrading	Sturgeon County	Phase 1	2010	\$ 2,900	\$ 1,305	\$ 10.89
Total Capital Region 2010					\$ 8,500	\$ 3,825	\$ 31.18
Fort Hills Energy Corp. / Petro Canada	Fort Hills Project	Sturgeon County	Phase 1	2011	\$ 7,000	\$ 3,150	\$ 26.28
Total Sturgeon County 2011					\$ 7,000	\$ 3,150	\$ 26.28
Shell	Scotford Upgrader II	Strathcona County	Phase 1	2012	\$ 5,500	\$ 2,475	\$ 19.93
Shell	Scotford Upgrader II	Strathcona County	Phase 2	2012	\$ 5,500	\$ 2,475	\$ 19.93
Shell	Scotford Upgrader II	Strathcona County	Phase 3	2012	\$ 5,500	\$ 2,475	\$ 19.93
Shell	Scotford Upgrader II	Strathcona County	Phase 4	2012	\$ 5,500	\$ 2,475	\$ 19.93
Statoil	Bitumen Upgrader	Strathcona County	Phase 1	2012	\$ 3,750	\$ 1,688	\$ 13.59
Total Capital Region 2012					\$ 25,750	\$ 11,588	\$ 93.32
Total E&P Canada	Strathcona	Strathcona County	Phase 1	2014	\$ 2,500	\$ 1,125	\$ 9.06
Total E&P Canada	Strathcona	Strathcona County	Phase 2	2014	\$ 2,500	\$ 1,125	\$ 9.06
Statoil	Bitumen Upgrader	Strathcona County	Phase 2	2014	\$ 3,750	\$ 1,688	\$ 13.59
Total Capital Region 2014					\$ 8,750	\$ 3,938	\$ 31.71
North West Upgrading	North West Upgrading	Sturgeon County	Phase 2	2015	\$ 1,600	\$ 720	\$ 6.01
North West Upgrading	North West Upgrading	Sturgeon County	Phase 3	2015	\$ 1,600	\$ 720	\$ 6.01
Fort Hills Energy Corp. / Petro Canada	Fort Hills Project	Sturgeon County	Phase 2	2015	\$ 6,050	\$ 2,723	\$ 22.71
Fort Hills Energy Corp. / Petro Canada	Fort Hills Project	Sturgeon County	Phase 3	2015	\$ 6,050	\$ 2,723	\$ 22.71
Total Sturgeon County 2015					\$ 15,300	\$ 6,885	\$ 57.44
BA Energy	Heartland	Strathcona County	Phase 2	TBD	\$ 1,000	\$ 450	\$ 3.62
BA Energy	Heartland	Strathcona County	Phase 3	TBD	\$ 1,000	\$ 450	\$ 3.62
Total Capital Region TBD***					\$ 2,000	\$ 900	\$ 7.25
Total All Projects Capital Region					\$ 69,800	\$ 31,010	\$ 253.03

This listing is found in the *Inventory of Major Projects* (Alberta Employment, Immigration and Industry, August 2007)

Strathcona Tax Rate 8.05339

*** TBD – Date to be Determined

Sturgeon Tax Rate 8.3422

Scenario 4

Company Name	Project Name	Location	Phase	Scheduled Start-Up	Capital Expenditure (Millions)	Assessed Value (Millions)	Increased Property Tax Revenue in 2007 dollars*
BA Energy	Heartland	Strathcona County	Phase 1	2008	\$ 900	\$ 405	\$ 3.26
Petro-Canada	Strathcona Refinery Conversion	Strathcona County	Only	2008	\$ 2,000	\$ 400	\$ 3.22
Total Capital Region 2008					\$ 2,900	\$ 805	\$ 6.48
Albian Sands Energy Ltd. (Shell SE1)	Scotford Upgrader I Expansion	Strathcona County	Expansion 1	2009	\$ 5,600	\$ 2,520	\$ 20.30
Total Capital Region 2009					\$ 5,600	\$ 2,520	\$ 20.30
BA Energy	Heartland	Strathcona County	Phase 2	2010	\$ 1,000	\$ 450	\$ 3.62
North West Upgrading	North West Upgrading	Sturgeon County	Phase 1	2010	\$ 2,900	\$ 1,305	\$ 10.89
Total Capital Region 2010					\$ 3,900	\$ 1,755	\$ 14.51
Fort Hills Energy Corp. / Petro Canada	Fort Hills Project	Sturgeon County	Phase 1	2011	\$ 7,000	\$ 3,150	\$ 26.28
Synenco	Northern Lights	Sturgeon County	Phase 1	2011	\$ 3,150	\$ 1,418	\$ 11.83
Total Sturgeon County 2011					\$ 10,150	\$ 4,568	\$ 38.10
BA Energy	Heartland	Strathcona County	Phase 3	2012	\$ 1,000	\$ 450	\$ 3.62
Total Capital Region 2012					\$ 1,000	\$ 450	\$ 3.62
Shell (SU2)	Scotford Upgrader II	Strathcona County	Phase 1	2013	\$ 5,950	\$ 2,678	\$ 21.56
North West Upgrading	North West Upgrading	Sturgeon County	Phase 2	2013	\$ 1,600	\$ 720	\$ 6.01
Statoil	Bitumen Upgrader	Strathcona County	Phase 1	2013	\$ 7,100	\$ 3,195	\$ 25.73
Synenco	Northern Lights	Sturgeon County	Phase 2	2013	\$ 3,150	\$ 1,418	\$ 11.83
Total E&P Canada	Strathcona	Strathcona County	Phase 1	2013	\$ 5,000	\$ 2,250	\$ 18.12
Total Capital Region 2013					\$ 22,800	\$ 10,260	\$ 83.25
Fort Hills Energy Corp. / Petro Canada	Fort Hills Project	Sturgeon County	Phase 2	2015	\$ 7,000	\$ 3,150	\$ 26.28
Total Capital Region 2015					\$ 7,000	\$ 3,150	\$ 26.28
Shell (SU2)	Scotford Upgrader II	Strathcona County	Phase 2	2016	\$ 7,450	\$ 3,353	\$ 27.00
North West Upgrading	North West Upgrading	Sturgeon County	Phase 3	2016	\$ 1,600	\$ 720	\$ 6.01

Scenario 4 (continued)

Company Name	Project Name	Location	Phase	Scheduled Start-up	Capital Expenditure (Millions)	Assessed Value (Millions)	Increased Property Tax Revenue in 2007 dollars*
Total Capital Region 2016					\$ 9,050	\$ 4,073	\$ 33.01
Statoil	Bitumen Upgrader	Strathcona County	Phase 2	2017	\$ 7,100	\$ 3,195	\$ 25.73
Total E&P Canada	Strathcona	Strathcona County	Phase 2	2017	\$ 5,000	\$ 2,250	\$ 18.12
Total Capital Region 2017					\$ 12,100	\$ 5,445	\$ 43.85
Shell (SU2)	Scotford Upgrader II	Strathcona County	Phase 3	2019	\$ 5,950	\$ 2,678	\$ 21.56
Total Capital Region 2019					\$ 5,950	\$ 2,678	\$ 21.56
Shell (SU2)	Scotford Upgrader II	Strathcona County	Phase 4	2022	\$ 7,450	\$ 3,353	\$ 27.00
Total Capital Region 2022					\$ 7,450	\$ 3,353	\$ 27.00
Total All Projects Capital Region					\$ 87,900	\$ 39,055	\$ 317.96

This listing is found in the draft report by Nichol Applied Management titled *"Upgrader Developments in Alberta's Industrial Heartland: Workforce and Population Impacts"*
 Strathcona Tax Rate 8.05339
 Sturgeon Tax Rate 8.3422