

Nevada Assembly Bill 239 (AB 239) Cost-Benefit Model

Table of Contents

User Input Sheet:

A Required Inputs

Concluding Analyses (Results Sheet):

B Concluding Analyses

Supporting Calculations (Do Not Use Unless Altering Model)

C Pro Forma Financial Statements (Selected Items)

D Economic Impacts

E Tax Rate Summaries

F List Options

Nevada Assembly Bill 239 (AB 239) Cost-Benefit Model

A. Required Inputs

Required Information

Provided by Applicant

Facility location (Nevada county)

Description of facility:

Energy type

Development cost estimates:

Total investment

Underlying land value

Construction labor cost as percent of total investment

Construction employees (person-years)

Percentage of construction employees that are county residents

Percentage of non-labor cost of investment to be retained in-county

Construction period (years)

Average annual wages per construction employee

Operating data estimates:

Number of employees expected to be required to operate facility

Percentage of operating employees that will be county residents

Budgeted annual salaries and wages for ongoing operations

Ongoing annual taxable maintenance expenses (e.g., supplies)

Capital contributions made by developer (e.g., roads, parks, etc. built by applicant on behalf of the county)

Provided by County Officials

Total one-time expenses related to development and/or construction of project

Estimated annual ongoing expenses

No

Inputs

Esmeralda

Biomass

\$20,000,000
\$1,000,000
20%
100
60%
20%
1
\$60,000

20
80%
\$1,000,000
\$200,000

\$100,000

\$1,000,000
\$100,000

New sales tax abatement rates are effective July 1, 2015. Based on known application/project time, use new rates?

Guidance/Special Instructions

Click on cell to access list of choices in dropdown box

Click on cell to access list of choices in dropdown box

Enter as dollar amount (e.g., \$20,000,000)

Enter as dollar amount (e.g., \$1,000,000)

Ensure input appears as percentage (e.g., 20%)

Enter as person-years, that is, one person employed for one year (e.g., 100 equals 100 people employed for 1 year, or 50 people employed for 2 years)

Ensure input appears as percentage (e.g., 60%)

Ensure input appears as percentage (e.g., 20%)

Enter as a whole year (round up) (e.g., 1 for one-year, 2 for two-year)

Enter as dollar amount (e.g., \$60,000)

Enter as employee count (e.g., 20)

Enter as percentage (e.g., 80%)

Enter as dollar amount (e.g., \$1,000,000)

Enter as dollar amount (e.g., \$200,000)

Enter as dollar amount (e.g., \$100,000)

Enter as dollar amount (e.g., \$1,000,000)

Enter as dollar amount (e.g., \$100,000)

Nevada Assembly Bill 239 (AB 239) Cost-Benefit Model

B. Concluding Analyses

Section 4 of AB 239 allows the board of county commissioners in a Nevada county to deny a request for incentives if either of the following two conditions is found to be true based on relevant information:

1. Will the projected cost of the services that the local government is required to provide to the facility exceed the amount of tax revenue that the local government is projected to receive as a result of the abatement?	YES	<i>If yes, grounds for denial of application may exist.</i>
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OR

2. Will the projected financial benefits that will result to the county from the employment by the facility of the residents of the state of Nevada and from capital investments by the facility in the county not exceed the projected loss of tax revenue that will result from the abatement?	NO	<i>If yes, grounds for denial of application may exist.</i>
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<i>No</i>	<i>Optional: Include indirect and induced impacts for purposes of Q2?</i>
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Concluding Analysis #1 Supporting Detail:

Projected cost of services that the local government is required to provide to the facility (20 year horizon):

\$3,000,000

Amount of tax revenue that the local government will receive as a result of the abatement (20 year horizon):

\$1,799,471

Cost of services minus tax revenue over 20 year horizon:

\$1,200,529

Projected cost of services net of tax revenue received from project (should be negative number for approval)

Concluding Analysis #2 Supporting Detail:

Projected financial benefits resulting from the employment of county residents and capital investments by the facility (20 year horizon):

\$7,200,000

\$9,079,091

Including indirect and induced impacts of in-county resident labor

Projected loss of tax revenue resulting from the abatement:

\$2,015,654

Financial benefit minus loss of tax revenue (20 year horizon):

\$5,184,346

\$7,063,438

Including indirect and induced impacts of in-county resident labor

\$5,184,346

Result of chosen method

Add financial benefit to county of capital contributions made by developer on behalf of county:

\$5,284,346

Total financial benefits (should be positive number for approval)

Nevada Assembly Bill 239 (AB 239) Cost-Benefit Model

C. Pro Forma Financial Statement (Selected items)

	Year 1
<u>Investment/expenses</u>	
Initial investment	\$ (20,000,000)
Taxable one-time purchases (construction expenses subject to sales tax)	\$ 16,000,000
Land cost	\$ (1,000,000)
Ongoing annual maintenance (taxable)	\$ -
Labor expense	\$ -
Labor expense retained in-state	\$ -
<u>Asset values</u>	
Land (non-depreciable)	\$ 1,000,000
Improvement value at cost (full materials value assigned beginning in Year 2 regardless of construction length)	\$ -
Depreciated value	
Assessed value	\$ 350,000
<u>Property taxes</u>	
Property tax rate	3.0195
County components	2.8495
Property taxes (no abatements)	\$ 10,568
Abated property tax	\$ 5,813
Amount of property tax paid after abatement applied	\$ 4,756
County - amount owed (no abatements)	\$ 9,973
County - amount abated	\$ 5,485
County - amount collected	\$ 4,488
<u>Sales taxes</u>	
Sales tax rate	6.85%
County components	4.85%
Abated rate	2.60%
Sales taxes (no abatements)	\$ 1,096,000
Abated sales tax	\$ 680,000
Amount of sales tax paid after abatement applied	\$ 416,000
County - amount owed (no abatements)	\$ 776,000
County - amount abated	\$ 360,000
County - amount collected	\$ 416,000

Year 2		Year 3		Year 4		Year 5		Year 6	
\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000
\$	1,000,000	\$	1,000,000	\$	1,000,000	\$	1,000,000	\$	1,000,000
\$	800,000	\$	800,000	\$	800,000	\$	800,000	\$	800,000
\$	1,000,000	\$	1,000,000	\$	1,000,000	\$	1,000,000	\$	1,000,000
\$	16,000,000	\$	16,000,000	\$	16,000,000	\$	16,000,000	\$	16,000,000
\$	16,000,000	\$	15,760,000	\$	15,523,600	\$	15,290,746	\$	15,061,385
\$	5,950,000	\$	5,866,000	\$	5,783,260	\$	5,701,761	\$	5,621,485
\$	179,660	\$	177,124	\$	174,626	\$	172,165	\$	169,741
\$	98,813	\$	97,418	\$	96,044	\$	94,691	\$	93,357
\$	80,847	\$	79,706	\$	78,581	\$	77,474	\$	76,383
\$	169,545	\$	167,152	\$	164,794	\$	162,472	\$	160,184
\$	93,250	\$	91,933	\$	90,637	\$	89,359	\$	88,101
\$	76,295	\$	75,218	\$	74,157	\$	73,112	\$	72,083
\$	13,700	\$	13,700	\$	13,700	\$	13,700	\$	13,700
\$	8,500	\$	8,500	\$	-	\$	-	\$	-
\$	5,200	\$	5,200	\$	13,700	\$	13,700	\$	13,700
\$	9,700	\$	9,700	\$	9,700	\$	9,700	\$	9,700
\$	4,500	\$	4,500	\$	4,500	\$	4,500	\$	4,500
\$	5,200	\$	5,200	\$	5,200	\$	5,200	\$	5,200

	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
\$	200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
\$	1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000
\$	800,000	\$ 800,000	\$ 800,000	\$ 800,000	\$ 800,000	\$ 800,000
\$	1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000
\$	16,000,000	\$ 16,000,000	\$ 16,000,000	\$ 16,000,000	\$ 16,000,000	\$ 16,000,000
\$	14,835,464	\$ 14,612,932	\$ 14,393,738	\$ 14,177,832	\$ 13,965,165	\$ 13,755,687
\$	5,542,412	\$ 5,464,526	\$ 5,387,808	\$ 5,312,241	\$ 5,237,808	\$ 5,164,490
\$	167,353	\$ 165,001	\$ 162,685	\$ 160,403	\$ 158,156	\$ 155,942
\$	92,044	\$ 90,751	\$ 89,477	\$ 88,222	\$ 86,986	\$ 85,768
\$	75,309	\$ 74,251	\$ 73,208	\$ 72,181	\$ 71,170	\$ 70,174
\$	157,931	\$ 155,712	\$ 153,526	\$ 151,372	\$ 149,251	\$ 147,162
\$	86,862	\$ 85,641	\$ 84,439	\$ 83,255	\$ 82,088	\$ 80,939
\$	71,069	\$ 70,070	\$ 69,087	\$ 68,118	\$ 67,163	\$ 66,223
\$	13,700	\$ 13,700	\$ 13,700	\$ 13,700	\$ 13,700	\$ 13,700
\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
\$	13,700	\$ 13,700	\$ 13,700	\$ 13,700	\$ 13,700	\$ 13,700
\$	9,700	\$ 9,700	\$ 9,700	\$ 9,700	\$ 9,700	\$ 9,700
\$	4,500	\$ 4,500	\$ 4,500	\$ 4,500	\$ 4,500	\$ 4,500
\$	5,200	\$ 5,200	\$ 5,200	\$ 5,200	\$ 5,200	\$ 5,200

	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18
\$	200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
\$	1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000
\$	800,000	\$ 800,000	\$ 800,000	\$ 800,000	\$ 800,000	\$ 800,000
\$	1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000
\$	16,000,000	\$ 16,000,000	\$ 16,000,000	\$ 16,000,000	\$ 16,000,000	\$ 16,000,000
\$	13,549,352	\$ 13,346,111	\$ 13,145,920	\$ 12,948,731	\$ 12,754,500	\$ 12,563,183
\$	5,092,273	\$ 5,021,139	\$ 4,951,072	\$ 4,882,056	\$ 4,814,075	\$ 4,747,114
\$	153,761	\$ 151,613	\$ 149,498	\$ 147,414	\$ 145,361	\$ 143,339
\$	84,569	\$ 83,387	\$ 82,224	\$ 81,078	\$ 79,949	\$ 78,837
\$	69,193	\$ 68,226	\$ 67,274	\$ 66,336	\$ 65,412	\$ 64,503
\$	145,104	\$ 143,077	\$ 141,081	\$ 139,114	\$ 137,177	\$ 135,269
\$	79,807	\$ 78,693	\$ 77,594	\$ 76,513	\$ 75,447	\$ 74,398
\$	65,297	\$ 64,385	\$ 63,486	\$ 62,601	\$ 61,730	\$ 60,871
\$	13,700	\$ 13,700	\$ 13,700	\$ 13,700	\$ 13,700	\$ 13,700
\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
\$	13,700	\$ 13,700	\$ 13,700	\$ 13,700	\$ 13,700	\$ 13,700
\$	9,700	\$ 9,700	\$ 9,700	\$ 9,700	\$ 9,700	\$ 9,700
\$	4,500	\$ 4,500	\$ 4,500	\$ 4,500	\$ 4,500	\$ 4,500
\$	5,200	\$ 5,200	\$ 5,200	\$ 5,200	\$ 5,200	\$ 5,200

Year 19	Year 20	Total
		\$ (20,000,000)
		\$ 16,000,000
		\$ (1,000,000)
\$ 200,000	\$ 200,000	\$ 3,800,000
		\$ -
\$ 1,000,000	\$ 1,000,000	\$ 19,000,000
\$ 800,000	\$ 800,000	\$ 15,200,000
		\$ -
		\$ -
\$ 1,000,000	\$ 1,000,000	\$ 20,000,000
\$ 16,000,000	\$ 16,000,000	\$ 304,000,000
\$ 12,374,735	\$ 12,189,114	\$ 266,248,194
\$ 4,681,157	\$ 4,616,190	\$ 100,186,868
\$ 141,348	\$ 139,386	\$ 3,025,142
\$ 77,741	\$ 76,662	\$ 1,663,828
\$ 63,606	\$ 62,724	\$ 1,361,314
\$ 133,390	\$ 131,538	\$ 2,854,825
\$ 73,364	\$ 72,346	\$ 1,570,154
\$ 60,025	\$ 59,192	\$ 1,284,671
\$ 13,700	\$ 13,700	\$ 1,356,300
\$ -	\$ -	\$ 697,000
\$ 13,700	\$ 13,700	\$ 659,300
\$ 9,700	\$ 9,700	\$ 960,300
\$ 4,500	\$ 4,500	\$ 445,500
\$ 5,200	\$ 5,200	\$ 514,800

Nevada Assembly Bill 239 (AB 239) Cost-Benefit Model

D. Economic Impacts

Construction Multipliers

Industry code 36	Direct	Indirect	Induced	Total
Employment	6.27	2.37	3.68	12.33
Labor Income	0.42	0.12	0.15	0.69
Output	1.00	0.30	0.44	1.74

Operations Multipliers

Industry code 31	Direct	Indirect	Induced	Total
Employment	1.75	0.41	1.65	3.80
Labor Income	0.22	0.02	0.07	0.31
Output	1.00	0.06	0.20	1.25

Multipliers sourced to Minnesota IMPLAN Group, Inc., IMPLAN Model 26 (2013)

Summary of Impacts for Concluding Analysis #2

Benefit of capital investment in county:

Total investment

Percentage of non-labor cost of investment to be retained in-county

Total

Direct benefit of employment of county residents:

Construction

Operations

Total

Indirect and induced benefits of employment of county residents:

Construction

Operations

Total

Other financial benefits resulting from the project, including capital contributions made by the
Capital contributions

Project Construction Impacts

	Direct	Indirect	Induced	Total
Employment	67	25	39	131
Labor Income	\$ 4,000,000	\$ 1,192,917	\$ 1,414,146	\$ 6,607,063
Output	\$ 9,634,329	\$ 2,883,813	\$ 4,215,157	\$ 16,733,300

Project Operation Impacts (Recurring Annual Impacts)

	Direct	Indirect	Induced	Total
Employment	20	5	19	44
Labor Income	\$ 1,000,000	\$ 95,441	\$ 298,125	\$ 1,393,566
Output	\$ 4,540,378	\$ 254,230	\$ 888,579	\$ 5,683,187

\$20,000,000

20%

\$4,000,000 *Capital investment*

\$ 2,400,000

\$ 800,000

\$ 3,200,000 *Employment benefits (direct)*

\$ 1,564,238

\$ 314,853

\$ 1,879,091 *Indirect and induced employment benefits*

Developer:

\$ 100,000 *Other capital contributions by developer*

Nevada Assembly Bill 239 (AB 239) Cost-Benefit Model

E. Tax Rate Summaries

Property tax rates

<u>County</u>	<u>Average countywide rate</u>	<u>State portion</u>	<u>Local components</u>
Carson City	3.5435	0.1700	3.3735
Churchill	3.0220	0.1700	2.8520
Clark	3.0554	0.1700	2.8854
Douglas	3.1436	0.1700	2.9736
Elko	2.8958	0.1700	2.7258
Esmeralda	3.0195	0.1700	2.8495
Eureka	1.7772	0.1700	1.6072
Humboldt	2.4850	0.1700	2.3150
Lander	3.3576	0.1700	3.1876
Lincoln	3.0776	0.1700	2.9076
Lyon	3.3553	0.1700	3.1853
Mineral	3.6600	0.1700	3.4900
Nye	3.3350	0.1700	3.1650
Pershing	3.2018	0.1700	3.0318
Storey	3.4607	0.1700	3.2907
Washoe	3.5689	0.1700	3.3989
White Pine	3.6600	0.1700	3.4900

Source: NV Department of Taxation Redbook 2013-2014

Sales tax rates

County	Total rate	State rate	Local components
Carson City	7.48%	2.0%	5.48%
Churchill	7.60%	2.0%	5.60%
Clark	8.10%	2.0%	6.10%
Douglas	7.10%	2.0%	5.10%
Elko	6.85%	2.0%	4.85%
Esmeralda	6.85%	2.0%	4.85%
Eureka	6.85%	2.0%	4.85%
Humboldt	6.85%	2.0%	4.85%
Lander	7.10%	2.0%	5.10%
Lincoln	7.10%	2.0%	5.10%
Lyon	7.10%	2.0%	5.10%
Mineral	6.85%	2.0%	4.85%
Nye	7.10%	2.0%	5.10%
Pershing	7.10%	2.0%	5.10%
Storey	7.60%	2.0%	5.60%
Washoe	7.73%	2.0%	5.73%
White Pine	7.73%	2.0%	5.73%

Source: NV Department of Taxation Sales Tax Map

Abated rate owed through June	
30, 2015	2.60%
Abated rate owed effective July	
1, 2015	2.25%

Source: NRS 701A.385

Nevada Assembly Bill 239 (AB 239) Cost-Benefit Model

F. List Options

<u>FacilityType</u>	<u>Location</u>	<u>YesNo</u>
Biomass	Carson City	Yes
Fuel cells	Churchill	No
Geothermal energy	Clark	
Solar energy	Douglas	
Waterpower	Elko	
Wind	Esmeralda	
	Eureka	
	Humboldt	
	Lander	
	Lincoln	
	Lyon	
	Mineral	
	Nye	
	Pershing	
	Storey	
	Washoe	
	White Pine	