

APPENDIX C

Greenhouse Gases Calculations

RSEIR Greenhouse Gas Emissions (tons) for all Years

Key Notes:

[1] Greenhouse gas emissions are inclusive of Rail and OGV emissions up to California border

RSEIR Emissions:

Project	Year	Emissions (tons)				Method Source
		CO2	CH4	N2O	100-Year GWP - CO2e	
Baseline	2008	40,531.00	2.86	3.18	42,238.00	Based on Calculations
Revised_Project	2009	45,460.50	3.29	3.60	46,541.34	Interpolation
Revised_Project	2010	50,390.00	3.72	4.02	51,598.32	Interpolation
Revised_Project	2011	55,319.50	4.15	4.44	56,655.29	Interpolation
Revised_Project	2012	60,249.00	4.58	4.86	62,446.00	Based on Calculations
Revised_Project	2013	88,225.00	6.13	7.95	90,578.84	Interpolation
Revised_Project	2014	116,201.00	7.68	11.05	121,708.00	Based on Calculations
Revised_Project	2015	111,853.75	6.98	11.17	115,109.80	Interpolation
Revised_Project	2016	107,506.50	6.28	11.28	110,774.18	Interpolation
Revised_Project	2017	103,159.25	5.57	11.40	106,438.56	Interpolation
Revised_Project	2018	98,812.00	4.87	11.52	104,491.00	Based on Calculations
Revised_Project	2019	108,556.00	5.18	11.94	114,612.00	Based on Calculations
Revised_Project	2020	140,483.00	8.43	16.76	148,405.00	Based on Calculations
Revised_Project	2021	244,902.00	14.81	28.25	257,156.00	Based on Calculations
Revised_Project	2022	221,404.00	17.34	28.46	234,344.00	Based on Calculations
Revised_Project	2023	190,378.00	18.28	22.93	201,311.00	Based on Calculations
Revised_Project	2024	165,073.00	15.46	18.97	170,711.86	Interpolation
Revised_Project	2025	139,768.00	12.64	15.01	144,242.18	Interpolation
Revised_Project	2026	114,463.00	9.83	11.05	121,309.00	Based on Calculations
Revised_Project	2027	118,943.00	9.93	11.45	122,363.40	Interpolation
Revised_Project	2028	123,423.00	10.03	11.84	126,954.30	Interpolation
Revised_Project	2029	127,903.00	10.13	12.24	131,545.20	Interpolation
Revised_Project	2030	132,383.00	10.23	12.63	136,136.11	Interpolation
Revised_Project	2031	136,863.00	10.33	13.03	140,727.01	Interpolation
Revised_Project	2032	141,343.00	10.43	13.42	145,317.91	Interpolation
Revised_Project	2033	145,823.00	10.53	13.82	149,908.81	Interpolation
Revised_Project	2034	150,303.00	10.63	14.21	154,499.72	Interpolation
Revised_Project	2035	154,783.00	10.73	14.61	159,090.62	Interpolation

Revised_Project	2036	159,263.00	10.83	15.00	168,379.00	Based on Calculations
Revised_Project	2037	158,493.00	10.78	14.85	162,869.49	Interpolation
Revised_Project	2038	157,723.00	10.72	14.71	162,057.45	Interpolation
Revised_Project	2039	156,953.00	10.67	14.56	161,245.42	Interpolation
Revised_Project	2040	156,183.00	10.62	14.41	160,433.39	Interpolation
Revised_Project	2041	155,413.00	10.57	14.26	159,621.35	Interpolation
Revised_Project	2042	154,643.00	10.51	14.11	158,809.32	Interpolation
Revised_Project	2043	153,873.00	10.46	13.97	157,997.28	Interpolation
Revised_Project	2044	153,103.00	10.41	13.82	157,185.25	Interpolation
Revised_Project	2045	152,333.00	10.36	13.67	161,070.00	Based on Calculations

Global Warming Potentials:

GHG	100-Year AR6 2021 Value	20-Year AR6 2021 Value
CO2	1	1
CH4 (fossil origin)	29.8	82.5
N2O	273	273

[IPCC Sixth Assessment Report Global Warming Potentials - ERCE Microsoft Word - Global-Warming-Potential-Values.docx](#)