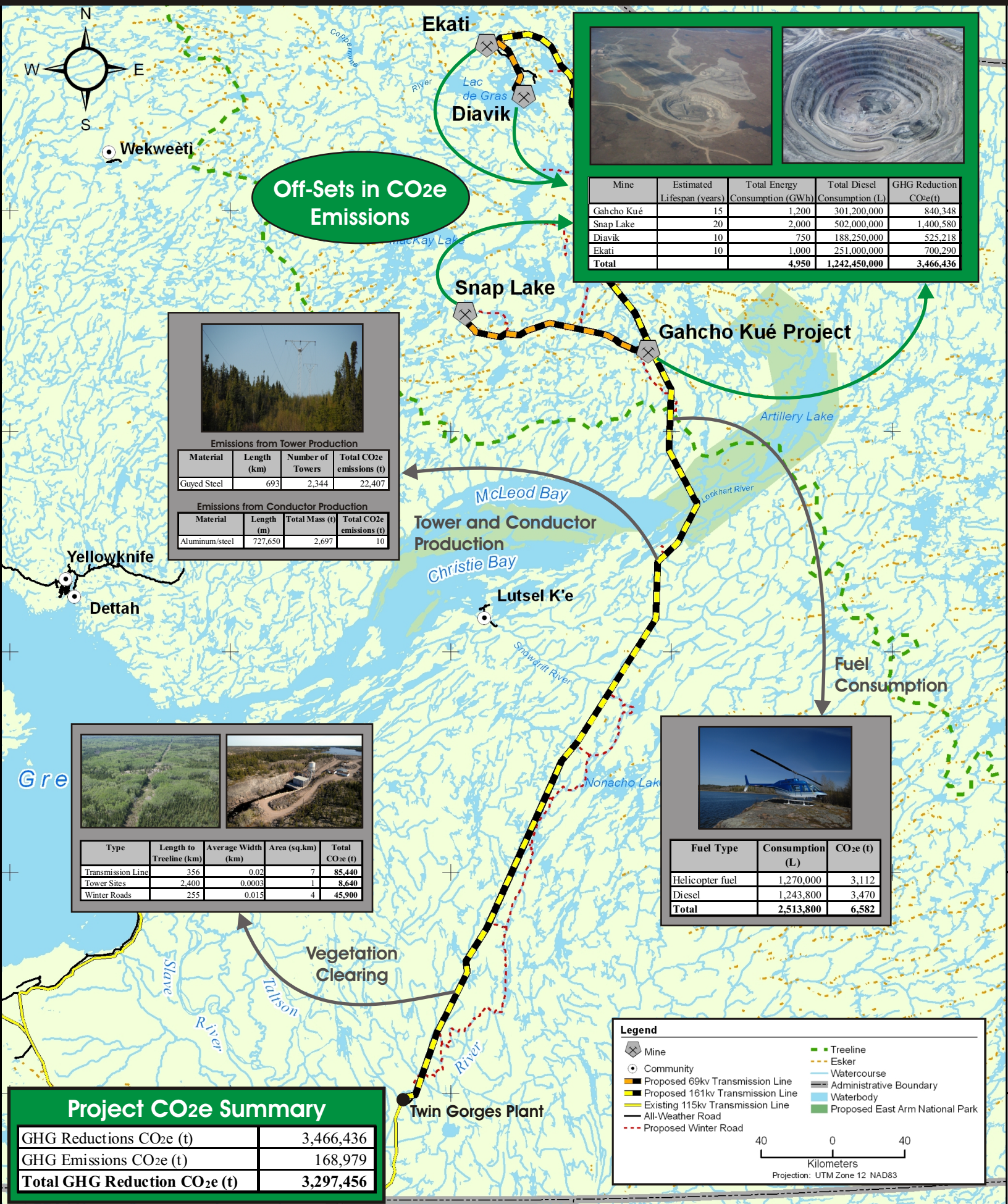
Taltson Hydroelectric Project
Greenhouse Gas Reduction/Emission Lifecycle Assessment
(3 Years of Construction and 20 Years of Operation)



Mine	Estimated Lifespan (years)	Total Energy Consumption (GWh)	Total Diesel Consumption (L)	GHG Reduction CO_2e (t)
Gahcho Kué	15	1,200	301,200,000	840,348
Snap Lake	20	2,000	502,000,000	1,400,580
Diavik	10	750	188,250,000	525,218
Ekati	10	1,000	251,000,000	700,290
Total		**4,950**	**1,242,450,000**	**3,466,436**

Emissions from Tower Production

Material	Length (km)	Number of Towers	Total CO_2e emissions (t)
Guyed Steel	693	2,344	22,407

Emissions from Conductor Production

Material	Length (m)	Total Mass (t)	Total CO_2e emissions (t)
Aluminum/steel	727,650	2,697	10

Type	Length to Treeline (km)	Average Width (km)	Area (sq.km)	Total CO_2e (t)
Transmission Line	356	0.02	7	**85,440**
Tower Sites	2,400	0.0003	1	**8,640**
Winter Roads	255	0.015	4	**45,900**

Fuel Type	Consumption (L)	CO_2e (t)
Helicopter fuel	1,270,000	3,112
Diesel	1,243,800	3,470
Total	**2,513,800**	**6,582**

Project CO_2e Summary

GHG Reductions CO_2e (t)	3,466,436
GHG Emissions CO_2e (t)	168,979
Total GHG Reduction CO_2e (t)	**3,297,456**