



**ENVIRONMENTAL INDICATORS  
2016**

The following environmental indicators and metrics show the environmental performance of First Quantum over the 2016 calendar year. The data is compared to previous years. Data on fuel, electricity and material consumption is gathered mainly from the Company's financial accounting system and therefore has a high level of confidence. Various internationally accepted protocols and methodologies, shown below the following table, were used to collect the data. The scope of the reporting includes all sites where First Quantum has operational control of the project and over 50% ownership, including several closed properties and exploration worldwide.

<b>Indicators</b>	<b>Unit</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<i>Water - Fresh Surface Water Withdrawal</i>	<i>Megaliters</i>	Incomplete data	20,493	30,261	35,104
<i>Water - Saline/Brackish Water Withdrawal</i>	<i>Megaliters</i>		8,829	6,600	6,207
<i>Water - Fresh Groundwater Withdrawal</i>	<i>Megaliters</i>		14,120	10,957	11,864
<i>Water - Municipal and Waste Water Withdrawal</i>	<i>Megalitres</i>		450	395	934
<i>Water - Total Water Withdrawal (excluding precipitation)</i>	<i>Megaliters</i>		47,264	69,464	129,745
<i>Water - Intensity (withdrawal / milled ore)</i>	<i>Megaliters / Ton</i>		0.94	0.78	1.18
<i>Water - Discharge</i>	<i>Megaliters</i>		50,475	84,767	130,669
<i>Electricity - Consumption</i>	<i>MWh's</i>	1,606,836	1,775,757	2,299,259	2,251,067
<i>CO<sub>2</sub> - Emissions Scope 1 Direct</i>	<i>Tons of CO<sub>2</sub></i>	1,055,584	1,197,118	1,296,327	1,262,636
<i>CO<sub>2</sub> - Emissions Scope 2 Indirect</i>	<i>Tons of CO<sub>2</sub></i>	198,929	213,964	204,995	169,256
<i>CO<sub>2</sub> - Emissions Scope 1 and 2</i>	<i>Tons of CO<sub>2</sub></i>	1,254,513	1,411,082	1,501,322	1,431,893
<i>CO<sub>2</sub>-eq - Scope 3 Emissions from Air Travel</i>	<i>Tons of CO<sub>2</sub></i>	2,586	6,710	7,351	9,802
<i>CO<sub>2</sub>-eq - Intensity (scope 1 &amp; 2 / milled ore)</i>	<i>CO<sub>2</sub> / Ton</i>	0.033	0.029	0.024	0.017
<i>Area - Mining Licenses</i>	<i>Hectares</i>	107,519	107,519	116,556	108,598
<i>Area - Development Footprint</i>	<i>Hectares</i>	Incomplete data	19,195	19,543	20,282
<i>Area - Rehabilitated</i>	<i>Hectares</i>		3,165	3,389	3,228
<i>Fines / Penalties (environmental)</i>	<i>USD</i>	0	0	58,237	347,940
<i>Expenditure (environmental)*</i>	<i>000's USD</i>	33,200	35,900	27,975	26,052
<i>Asset Retirement Obligation (ARO)*</i>	<i>000's USD</i>	482,400	583,700	552,251	530,069
<i>Corporate Social Responsibility (community programs)**</i>	<i>000's USD</i>	44,500	37,900	24,009	19,810
<i>Non-hazardous Waste Generated</i>	<i>Tons</i>	Incomplete data	55,896	55,881	52,206
<i>Hazardous Waste Generated</i>	<i>Tons</i>		6,999	5,422	5,847
<i>Tailings Produced</i>	<i>000's Tons</i>		41,191	61,130	71,488
<i>Waste Rock Mined</i>	<i>000's Tons</i>		121,277	208,314	174,680

## References

1. The Greenhouse Gas Protocol: GHG Protocol Corporate Accounting and Reporting Standard - revised edition, World Resources Institute.
2. Worksheet for estimation of mobile CO<sub>2</sub> emissions, World Resources Institute, 2006.
3. Optional Emissions from Commuting, Business Travel and Product Transport; May 2008, US Environmental Protection Agency; EPA430-R-08-006.
4. National Greenhouse Accounts (NGA) Factors Australian Government Department of Climate Change, 2008 - Table 4
5. National Greenhouse and Energy Reporting System Measurement, Australian government, July 2013
6. The International Energy Agency CO<sub>2</sub> Emissions from Fuel Combustion Highlights, 2013
7. Annual Reports, First Quantum Minerals Ltd.
8. All water data was collected as per the Mineral Council of Australia's Water Accounting Framework for the Mineral Industry.