

Performance Data 2019

Tourmaline Sustainability Performance Metrics

	2016	2017	2018
Production			
Sales gas (MMcfd)	972,513	1,221,529	1,305,025
Liquids (bbl/d)	23,586	38,737	47,540
boe/d	185,672	242,325	265,044
Energy Efficiency			
Direct energy consumption (GJ)	16,888,382	20,578,659	21,678,813
Energy consumption intensity (GJ/m ³ OE)	1.57	1.46	1.41
Emissions¹			
GHG emissions intensity (direct + indirect) (tonnes CO ₂ e/boe)	0.0176	0.0177	0.0174
GHG emissions intensity (direct + indirect) (1000 tonnes CO ₂ e/m ³ OE)	0.1107	0.1113	0.1096
Direct GHG emissions (tonnes CO ₂ e)	1,054,602	1,381,730	1,440,428
Indirect GHG emissions (tonnes CO ₂ e)	137,733	183,180	245,074
Nitrogen oxides (NO _x) (tonnes)	6,012	7,984	7,229
Sulphur dioxide (SO ₂) (tonnes)	364	712	846
Methane emissions (tCO ₂ e)	NR ²	186,131	197,800
Flared gas (1000 m ³)	5,513	2,069	759
Vented gas (1000 m ³)	1,183	245	99
Spill Prevention			
Reportable spills (number)	8	14	13
Total volume of reportable spills (m ³)	NR ²	148.4	65.33
Number of fines and penalties	NR ²	0	0
Water Management			
Total water used for fracturing (m ³)	998,280	1,753,634	1,374,000
Total recycled water used (m ³)	500,857	918,218	675,000
Total fresh water used (m ³)	497,424	835,415	699,000
Total number of wells	149	260	186
Water per well (m ³)	6,700	6,745	7,387
Frac flow-back water produced (m ³) ^{3,4}	217,868	438,409	343,500
Frac flow-back water recycled (m ³) ^{3,4}	206,974	416,488	326,325
Frac flow-back water disposed (m ³) ^{3,4}	10,893	21,920	17,175
Percentage frac flow-back water recycled (%) ⁴	95%	95%	95%

¹Emissions are calculated using locally regulated methodology or locally recognized industry standards.

²NR means that the data was either not recorded or that the methodology changed year over year.

³Water management data was not recorded for NEBC and Spirit River prior to 2015.

⁴Frac flow-back data excludes oil operations.

Performance Data 2019

Tourmaline Sustainability Performance Metrics

	2016	2017	2018
Safety			
Recordable injuries (number)			
Employee	0	0	0
Contractors	15	50	44
Recordable injury frequency (injuries/200,000 work hours)			
Employee	0	0	0
Contractors	0.53	0.89	1.02
Lost time injuries (number)			
Employee	0	0	0
Contractors	2	12	5
Lost time injury frequency (injuries/200,000 work hours)			
Employee	0	0	0
Contractors	0.08	0.21	0.12
Fatalities (number)			
Employee	0	0	0
Contractors	0	0	0
People			
Total employees	194	210	237
Total contractors	169	219	227
Total staff (employees and contractors)	363	429	464
Production per employee (boed/person)	957	1,154	1,118
Production per staff (employee and contractors) (boed/person)	511	565	571
Voluntary turnover (number)	1	6	2
Gender diversity of employees (% women)	34%	35%	37%
Education & training	\$56,665	\$94,686	\$264,099
Education & training per employee	\$292	\$451	\$1,114
Donations			
Total donations	381,814	557,169	2,496,034
Value Distributed (\$Millions)			
Suppliers ¹	\$1,071.9	\$1,809.6	\$1,832.5
Providers of capital ²	\$40.6	\$44.3	\$152.3
Governments ³	\$81.9	\$138.9	\$131.8
Employees ⁴	\$47.4	\$62.0	\$65.3
Landowners ⁵	\$19.2	\$24.1	\$21.4
Communities ⁶	\$0.5	\$1.7	\$3.3

¹Economic value distributed to suppliers comprises all operating, transportation and general and administrative expenses as well as capital expenditures that are paid to suppliers other than employees, landowners, governments and for purposes of charitable donations. All figures are presented on an accrual basis.

²Economic value distributed to providers of capital includes interest expense and cash paid dividends.

³Economic value distributed to governments includes Crown royalty obligations, consideration paid to governments for surface rights of Crown-owned land, government licenses, fees & permits, corporate income taxes, property & business taxes and motor & carbon taxes. Excludes contributions to government pension plans and government employment insurance premiums made on behalf of employees. All figures are presented on an accrual basis. Due to the use of different reporting frameworks, figures presented will not necessarily conform with those presented in Tourmaline's annual reporting under the Extractive Sector Transparency Measures Act (ESTMA). For more information or to view Tourmaline's annual ESTMA report, please refer to Tourmaline's website at www.tourmalineoil.com.

⁴Economic value distributed to employees comprises of salaries, wages, employee benefits, and compensation related to Tourmaline's employee share-based compensation plans. All figures are presented on an accrual basis.

⁵Economic value distributed to landowners comprises of land access payments and royalty obligations to individuals and corporations associated with non-Crown owned lands. Excludes any payments for land access or royalties distributed to Indigenous communities.

⁶Economic value distributed to communities comprises of contributions to charitable and not-for-profit organizations as well as any payments made to Indigenous communities.