

Appendix A. Indicator data table

Governance & economy									
Financial	2012	2013	2014	2015	2016	% change	Footnote	GRI	Assurance
Common shares outstanding (millions) - period end	756	756	757	833	833	0	-	-	-
Market capitalization (CAD\$ millions)	25,162	22,984	18,148	14,583	16,916	16	-	G4-9	-
Gross sales (CAD\$ millions)	17,229	18,993	20,107	13,207	12,282	-7	-	-	-
Adjusted Funds Flow (CAD\$ millions)	3,643	3,609	3,479	1,691	1,423	-16	EN-01	-	-
Per share - diluted (CAD\$)	4.80	4.76	4.59	2.07	1.71	-17	-	-	-
Annual capital investments (CAD\$ millions)	3,368	3,262	3,051	1,714	1,026	-40	EN-02	EC1	-
Operating expenses (CAD\$ millions)	1,667	1,782	2,045	1,839	1,683	-8	EN-03; EN-06	-	-
Dividends per common share (\$/share)	0.8800	0.9680	1.0648	0.8524	0.2000	-77	-	EC1	-
Dividend yield (%)	2.6	3.2	4.4	4.9	1.0		EN-04	-	-
Current income tax expense (CAD\$ millions)	309	188	92	574	(173)	-130	-	EC1	-
Gross employee wages and benefits (CAD\$ millions)	655	713	769	730	600	-18	EN-05; EN-07; EN-08	EC1	-
Royalties (CAD\$ millions)	387	336	465	143	148	3	-	EC1	-
Total assets (CAD\$ millions)	24,216	25,224	24,695	25,791	25,258	-2	-	-	-
Debt to capitalization ratio (%)	32	33	35	34	35		EN-01	-	-
Net debt to capitalization ratio (%)	27	29	31	16	18	13	EN-01		

EN-01 Non-GAAP measure as referenced in our advisory.

EN-02 Capital expenditures before acquisition capital.

EN-03 Operating expenses for 2011 and 2012 have been restated to conform to the presentation adopted for the year ended December 31, 2013.

EN-04 Based on TSX closing share price at year end 2016 using annualized dividend.

EN-05 Employee salaries and benefits are recorded in either operating and general and administrative expenses, or property, plant and equipment and exploration and evaluation assets, corresponding to the type of service provided.

EN-06 Employee stock-based compensation costs previously included in operating expense were reclassified to general and administrative expense for 2014 and 2013 to conform to the presentation adopted in 2015.

EN-07 Gross employee wages includes salaries, short-term benefits, bonuses, pension costs and severance.

EN-08 Values for all reported years have been restated to better align with GRI EC1 indicator reporting criteria.

Operating production and reserves		2012	2013	2014	2015	2016	% change	Footnote	GRI	Assurance
Gross production, before royalties	Oil sands (Mbbbls/yr)	65,554	74,775	93,602	102,371	109,541	7	OP-01	-	-
	Total (MBOE/yr)	130,962	139,149	155,170	158,673	160,228	1	OP-01	-	-
Net land position (million hectares)		2.8	2.8	2.7	2.3	2.2	-4	-	-	-
Total proved reserves (MMBOE)		2,175	2,284	2,379	2,546	2,667	5	-	OG1	-
Bitumen proved reserves (MMbbls)		1,717	1,846	1,970	2,183	2,343	7	-	OG1	-

OP-01 Gross production numbers are disclosed in this report because we calculate our emissions and water intensities using 100 percent of production. Our financial results report our Foster Creek and Christina Lake production on a net basis to account for the 50 percent ownership of these properties with ConocoPhillips prior to May 17, 2017. Values have been restated from previous reporting to reflect a reporting change that more accurately reflects operating conditions and volumes in Petrinex. Natural gas is converted using a 6:1 oil equivalent. Also see our Advisory on page 98 of our 2016 Annual Report.

Governance	2012	2013	2014	2015	2016	% change	Footnote	GRI	Assurance
Business conduct investigations	26	38	30	27	18	-33	GV-01	-	-
Integrity Helpline intakes	110	132	161	117	81	-31	-	-	-
Monetary value of significant fines and total non-monetary sanctions for non-compliance with environmental laws and regulations (CAD\$)	0	259,385	0	0	0	-	GV-02	SO8	-
Political donations (CAD\$)	124,200	100,325	131,000	62,000	14,700	-76	GV-03	SO6	-

GV-01 Investigations can include (but are not limited to) compliance with laws and regulations, conflict of interest, fraud, confidentiality and disclosure and other potential breaches of policies and practices.

GV-02 Data includes regulatory fines related to environmental, health and safety contraventions paid during the stated year. Our fine in 2013 included the \$252,385 administrative penalty for unlicensed water withdrawals at our prospective Steepbank oil sands operations and the \$7,000 administrative penalty for SO₂ exceedances at Christina Lake.

GV-03 As of March 2017, Cenovus no longer makes political donations as a matter of policy.

Community									
Community investment and involvement	2012	2013	2014	2015	2016	% change	Footnote	GRI	Assurance
London Benchmarking Group (LBG) corporate giving in Canada									
Employee giving - Cenovus contribution (CAD\$)	1,747,016	2,177,897	2,146,823	1,677,948	1,470,830	-12	CI-02	-	LBG
Cash investments (CAD\$)	13,103,194	14,678,783	13,895,378	8,484,970	5,780,707	-32	CI-04	EC1	LBG
Cash investments, in-kind donations, employee volunteering during work hours and management costs to run our community investment program (CAD\$)	15,781,416	17,998,568	17,393,272	11,347,879	7,549,788	-33	CM-03	-	LBG
External resources leveraged which include employee giving facilitated by Cenovus (CAD\$)	-	-	2,146,823	2,619,788	1,607,971	-39	CI-04	-	LBG
Combined value of our investments to the community, plus external resources leveraged which include employee giving facilitated by Cenovus (CAD\$)	17,528,432	20,166,465	19,540,095	13,967,668	9,157,759	-34	CI-04	-	LBG
Value of employee volunteering during paid working hours (CAD\$)	-	20,670	176,397	65,448	108,255	65	CI-04	-	LBG
In-kind giving: product or services donations, projects, partnerships or similar (CAD\$)	-	1,041,733	154,062	324,605	600,685	85	CI-04	-	LBG
Management overheads (CAD\$)	-	2,247,382	3,167,434	2,472,856	1,060,141	-57	CI-04	-	LBG
London Benchmarking Group (LBG) corporate giving in Canada - percent contribution by focus area									
Learning (%)	26	34	43	35	38		-	-	LBG
Safety and well-being (%)	45	44	39	48	22		-	-	LBG
Sustainable communities (%)	29	21	18	17	11		-	-	LBG
Employee programs giving (%)	n/a	n/a	n/a	n/a	29		-	-	-
London Benchmarking Group (LBG) corporate giving in Canada - contribution by type									
Charitable donations (%)	-	60	48	68	62		CI-01	-	LBG
Community investments (%)	-	28	31	10	19		CI-01	-	LBG
Commercial initiatives (%)	-	12	21	22	19		CI-01	-	LBG

Aboriginal engagement	2012	2013	2014	2015	2016	% change	Footnote	GRI	Assurance
Aboriginal business spending (CAD\$ millions)	327	395	384	297	198	-33	AE-01	EC9	EY
Aboriginal business spending as percent of total company spend (%)	9.7	12.1	12.4	17.3	19.0		AE-02	EC9	-
Operations with implemented local community engagement, impact assessments, and development programs (%)	100	100	100	100	100	0	AE-03	SO1	-

- CI-01 As defined by the London Benchmarking Group (LBG). Charitable donations include one-off or intermittent donations in response to charity appeals or in support of employee charitable activities. Community investments include longer-term, strategic involvement in community partnerships that address a specific range of social issues that are important to the company or to company stakeholders. Commercial initiatives include activities in the community that directly support a business objective or promote the commercial interest of the corporation.
- CI-02 Total Cenovus donations made from matching employee contributions in the Thanks & Giving and Matching Gifts programs. Cenovus matches employees' charitable donations up to \$25,000 per employee per year. Total does not include employee contribution.
- CI-03 Total value of company community investments as audited by LBG Canada.
- CI-04 As audited by LBG Canada.
- AE-01 All goods and/or services provided by either an Aboriginal-owned company (51 percent or more ownership) or an Aboriginal joint venture. The 2016 number reflects the total amount for goods and/or services provided in 2016 invoiced at the time the Aboriginal business spend report was generated.
- AE-02 Calculated as a percentage of 2016 annual capital investments.
- AE-03 Cenovus undertakes a number of activities relating to community engagement and impact assessments depending on the scale of our operations within a region and the type of impact they may have. Some programs, such as the Integrity Helpline and Expect Respect, apply to 100 percent of our operations. In regions such as southern Alberta where conventional oil and natural gas operations exist on private land, our staff liaise with landowners on an as-needed basis. Operations with a larger scale, such as our oil sands operations in northern Alberta, have more extensive assessment and engagement activities. For example, environmental impact assessments that include a socio-economic impact analysis are required as part of the regulatory process for our oil sands projects. Approvals we have received for our oil sands projects through this process require ongoing environmental monitoring programs. Additionally, Cenovus undertakes regular stakeholder engagement activities and has developed a number of long-term agreements with Aboriginal communities in our oil sands operating regions.

People										
Workforce		2012	2013	2014	2015	2016	% change	Footnote	GRI	Assurance
Voluntary employee turnover (%)		3.5	3.3	4.4	2.9	3.1		WF-02	-	-
Total workforce	Total	4,900	5,323	5,239	3,985	3,528	-11	WF-01	G4-9	-
	Employees	3,260	3,557	3,557	3,013	2,781	-8	WF-01	G4-9	-
	Contractors	1,640	1,766	1,682	972	747	-23	WF-01	G4-9	-
Gender breakdown (employees)	Male - total	2,245	2,462	2,477	2,164	2,020	-7	-	G4-10a, G4-10b, G4-10d	-
	Office	1,058	1,143	1,123	886	842	-5	-	G4-10a, G4-10b, G4-10d	-
	Field	1,187	1,319	1,354	1,278	1,178	-8	-	G4-10a, G4-10b, G4-10d	-
	Female - total	1,015	1,095	1,080	849	761	-10	-	G4-10a, G4-10b, G4-10d	-
	Office	875	946	935	720	648	-10	-	G4-10a, G4-10b, G4-10d	-
	Field	140	149	145	129	113	-12	-	G4-10a, G4-10b, G4-10d	-
Employees female (%)	Company wide	31	-	30	28	27		-	G4-10d	-
	Management positions	29	-	27	26	25		-	G4-10d	-
	Junior management positions	31	-	26	25	24		-	G4-10d	-
	Top management positions	18	-	19	18	22		WF-04	G4-10d	-
Age (employees)	<26	208	222	198	148	85	-43	-	LA12; G4-10d	-
	26-30	454	478	450	413	350	-15	-	LA12; G4-10d	-
	31-35	519	569	605	525	495	-6	-	LA12; G4-10d	-
	36-40	499	540	544	476	458	-4	-	LA12; G4-10d	-
	41-45	456	525	519	436	431	-1	-	LA12; G4-10d	-
	46-50	425	442	430	378	373	-1	-	LA12; G4-10d	-
	51-55	411	448	441	353	312	-12	-	LA12; G4-10d	-
	56-60	226	254	268	208	206	-1	-	LA12; G4-10d	-
>60	62	79	102	76	71	-7	-	LA12; G4-10d	-	
Average age (employees)	Company wide	41	41	41	41	41	0	-	LA12; G4-10d	-
	Office	40	40	40	42	42	0	-	LA12; G4-10d	-
	Field	41	42	42	40	41	3	-	LA12; G4-10d	-
Generational profile (count)	Generation Y	1,376	1,595	1,683	1,561	1,482	-4	WF-03	-	-
	Generation X	760	820	794	666	637	-5	WF-03	-	-
	Baby boomer	1,119	1,138	1,077	784	661	-16	WF-03	-	-
	Veteran	5	4	3	2	1	-50	WF-03	-	-

Workforce (continued)		2012	2013	2014	2015	2016	% change	Foot-note	GRI	Assurance
Generational profile (%)	Generation Y	42	45	47	52	53		WF-03	-	-
	Generation X	23	23	22	22	23		WF-03	-	-
	Baby boomer	34	32	30	26	24		WF-03	-	-
	Veteran	< 1	< 1	< 1	< 1	< 1		WF-03	-	-
Employees female (%)	Company wide	31	-	30	28	27		-	G4-10d	-
	Management positions	29	-	27	26	25		-	G4-10d	-
	Junior management positions	31	-	26	25	24		-	G4-10d	-
	Top management positions	18	-	19	18	22		WF-04	G4-10d	-
Location of employees (count)	Office	1,933	2,089	2,058	1,606	1,490	-7	-	-	-
	Field	1,327	1,468	1,499	1,407	1,291	-8	-	-	-
Location of employees (%)	Office	59	59	58	53	54		-	-	-
	Field	41	41	42	47	46		-	-	-
Employees covered by performance reviews (%)	Management by objective appraisal	-	-	100	100	100		-	LA11	-
	Multidimensional performance appraisal	-	-	100	100	100		-	LA11	-

WF-01 Employee total is based on head count and includes part-time employees.

WF-02 The three main reasons why employees left Cenovus were better job fit and career opportunity, retirement and relocation/working closer to home.

WF-03 Our generational profile is based on the study by Dr. Linda Duxbury as follows:

Generation Y: 1975-2000

Generation X: 1967-1974

Baby boomer: 1946-1966

Veteran: 1945 and earlier

WF-04 Top management is calculated using the following employee categories: President & CEO, Executive Vice-President, Senior Vice-President, Vice-President and Chief.

Health, wellness and safety		2012	2013	2014	2015	2016	% change	Footnote	GRI	Assurance
Total recordable injury frequency (number of injuries per 200,000 hours worked)	Total	0.91	0.80	0.65	0.39	0.42	8	HS-01	LA6	EY
	Employees	0.16	0.38	0.14	0.14	0.18	29	HS-01	-	-
	Contractors	1.09	0.88	0.75	0.46	0.50	9	HS-01	-	-
Lost time injury frequency (number of injuries per 200,000 hours worked)	Total	0.08	0.08	0.06	0.06	0.05	-17	HS-02	LA6	EY
	Employees	0.00	0.09	0.03	0.06	0.00	-100	HS-02	-	-
	Contractors	0.09	0.08	0.06	0.06	0.07	17	HS-02	-	-
Process safety events	Tier 1	-	-	-	1	0	-100	HS-04	OG-13	-
	Tier 2	-	-	-	5	6	20	HS-04	OG-13	-
Fatalities	Total	0	0	0	0	0	-	-	LA6	EY
Field employee health assessments	Total	349	7	247	1,076	292	-73	HS-03	-	-
Fitness challenge - team participation rate (%)	Total	34	35	26	30	na		HS-05	-	-
Short-term disability (% of employees returning to work)	Employees	97	96	95	90	92		-	-	-

- HS-01 Recordable injuries include lost-time injuries, restricted-work injuries as well as medical-aid injuries. Medical-aid injuries require medical attention but do not result in an employee being absent from work. Recordable injury frequency is the total number of recordable injuries per 200,000 hours worked.
- HS-02 A lost time injury is any injury that prevents a worker from returning to work the day following an incident and any subsequent work day beyond the day of the event. Lost time injury frequency is the total number of such injuries per 200,000 hours worked.
- HS-03 Periodic health assessments occur every two years for employees in safety-sensitive positions, where an employee has the responsibility for his or her own safety or the safety of other people, or as determined by regulatory requirement. The assessment includes a health history check review, audiometric testing (to meet regulatory requirements), a vision test (for driving) and pulmonary function test (to determine fitness for respirator use). Fitness for work requires that staff be in a condition to carry out their day-to-day job duties safely and effectively without putting their own health and safety at risk or the health and safety of other staff members, stakeholders, the public or the environment.
- HS-04 Cenovus follows the Canadian Association of Petroleum Producers (CAPP) Process Safety Event Reporting Guide, which is based on the American Petroleum Institute (API) Recommended Practice 754 and the International Association of Oil and Gas Producers (IOGP) Report 456. We are also an active member of CAPP's Process Safety Management Committee and are dedicated to improving process safety at Cenovus and throughout the industry through shared learnings and strategies.
- HS-05 Cenovus staff participate in an annual physical-activity-based challenge that encourages teamwork and empowers them to manage and improve their health. From 2012 to 2014, Cenovus participated in the Global Corporate Challenge (GCC) and reported this measure as the GCC participation rate. In 2015, Cenovus managed an internal physical-activity-based challenge where participants formed teams and tracked their preferred physical activities, which they converted into steps that propelled them through a virtual map of the historic Route 66. While a fitness challenge was not held in 2016, Cenovus maintained other health and wellness programs throughout the year.

Environment										
Air		2012	2013	2014	2015	2016	% change	Footnote	GRI	Assurance
SO ₂ emissions (tonnes)	Company wide	1,768	2,064	3,127	3,167	2,572	-19	EM-01; EM-10	EN2 1	EY
	Oil sands	879	887	903	942	1,083	15	REF-03; EM-10	-	-
SO ₂ emissions intensity (tonnes/thousand m ³ OE)	Company wide	0.08	0.09	0.13	0.13	0.10	-20	EM-10	-	-
	Oil sands	0.08	0.08	0.06	0.06	0.06	7	EM-10	-	-
NO _x emissions (tonnes)	Company wide	10,179	8,971	8,060	7,770	7,924	2	EM-02; EM-10	EN2 1	EY
	Oil sands	1,233	1,481	1,699	1,986	2,100	6	EM-10	-	-
NO _x emissions intensity (tonnes/thousand m ³ OE)	Company wide	0.48	0.40	0.32	0.31	0.31	0	EM-10	-	-
	Oil sands	0.12	0.12	0.11	0.12	0.12	0	EM-10	-	-
Volatile organic compounds (VOCs) (tonnes)	Company wide	575	516	2,446	5,088	2,306	-55	EM-10	EN2 1	-
	Oil sands	148	158	195	2,686	382	-86	EM-10	-	-
Total gas flared (thousands m ³)	Company wide	55,420	67,520	30,266	48,199	34,479	-28	EM-03;	-	-
	Oil sands	13,407	7,785	5,789	4,910	13,334	172	EM-10	-	-
Total gas vented (thousands m ³)	Company wide	8,209	5,605	3,834	22,094	14,496	-34	EM-04; EM-10	-	-
	Oil sands	see footnote	see footnote	see footnote	5,330	3,166	-41	EM-04; EM-10	-	-
Greenhouse gases (GHGs)		2012	2013	2014	2015	2016	% change	Footnote	GRI	Assurance
Direct GHG emissions (tonnes CO ₂ E)	Company wide (all sources)	4,657,427	4,949,843	5,564,499	5,944,918	6,539,702	10	EM-05; EM-10	EN1 5	EY
	Combustion	4,098,753	4,398,758	5,109,897	5,378,778	6,095,338	13	-	-	-
	Flaring	130,287	149,764	65,743	102,790	77,806	-24	-	-	-
	Venting	97,089	203,101	211,170	289,278	185,393	-36	-	-	-
	Fugitives	197,261	198,219	177,690	174,072	181,165	4	-	-	-
	Oil sands (all sources)	3,156,074	3,617,781	4,381,118	4,688,937	5,430,770	16	-	-	-
Direct GHG emissions intensity (tonnes CO ₂ E/m ³ OE)	Company wide	0.221	0.222	0.224	0.234	0.255	9	EM-10	EN1 8	EY
	Oil sands	0.303	0.304	0.295	0.288	0.312	8	EM-10	EN1 8	EY

GHG emissions intensity percent reduction vs. 2004	Oil sands	31.4	31.0	33.3	34.7	29.3	-	-	-	
Indirect GHG emissions (tonnes CO ₂ E)	Company wide	1,079,646	996,441	1,378,652	1,292,693	1,247,439	-4	EM-06	EN1 6	EY
	Oil sands	203,067	263,023	365,613	383,623	400,102	4	EM-10	EN1 6	EY
Indirect GHG emissions intensity (tonnes CO ₂ E/m ³ OE)	Company wide	0.051	0.045	0.055	0.051	0.049	-4	EM-10		
	Oil sands	0.019	0.022	0.025	0.024	0.023	-4	EM-10		
Net mass CO ₂ injected at Weyburn, SK (kilotonnes CO ₂)	Cumulative	20.0	21.9	24.2	26.3	28.3	8	EM-11	-	-
Methane		2012	2013	2014	2015	2016	% change	Footnote	GRI	Assurance
Methane emissions (tonnes CO ₂ E)	Company wide	624,275	567,000	470,800	531,065	435,958	-18	EM-09; EM-10	-	EY
	Oil sands	6,895	5,347	4,707	33,031	22,354	-32	EM-09; EM-10	-	-
Methane emissions intensity (tonnes CO ₂ E/m ³ OE)	Company wide	0.030	0.025	0.019	0.021	0.017	-19	EM-09; EM-10	-	-
	Oil sands	0.0007	0.0005	0.0003	0.0020	0.0013	-35	EM-09; EM-10	-	-
Methane emissions from natural gas production (tonnes CO ₂ E)	Company wide	see footnote	see footnote	see footnote	12,386	12,037	-3	EM-08; EM-10	-	-
Methane emissions intensity from natural gas production (tonnes CO ₂ E/BOE)	Company wide	see footnote	see footnote	see footnote	0.17	0.07	-60	EM-08; EM-10	-	-
Energy		2012	2013	2014	2015	2016	% change	Footnote	GRI	Assurance
Energy use (GJ)	Company wide	76,030,503	90,722,293	118,798,766	105,700,988	113,079,440	7	EM-07; EM-10	EN3	EY
	Oil sands	63,879,984	71,095,111	85,123,629	89,242,759	97,225,886	9	EM-10	EN3	EY
Energy intensity (GJ/m ³ OE)	Company wide	3.6	4.1	4.8	4.2	4.4	6	EM-10	EN5	EY
	Oil sands	6.1	6.0	5.7	5.5	5.6	2	EM-10	EN3	EY

EM-01 SO₂ is a by-product of the fuel combustion process. The decrease in our SO₂ emissions during 2016 was primarily due to a lower number of flaring events at our Weyburn facility. This decrease offsets a marginal increase in SO₂ emissions and intensity at our oil sands operations in 2016. As part of our environmental approvals for our facilities, we recover over 70 percent of the SO₂ that's produced at our oil sands operations.

EM-02 NO_x is also a by-product of the fuel combustion process. Cenovus-wide NO_x emissions remained relatively consistent in 2016 compared with 2015. The long-term decrease in NO_x emissions intensity reflects a shift of our total production towards oil sands, which is less NO_x intensive than our conventional oil and natural gas operations.

EM-03 Flaring is a controlled burning of natural gas. In 2016, the amount of gas flared at our oil sands operations increased due to a larger number of unforeseen flaring events. However, this increase was offset by a large reduction in flaring events and volumes within our conventional oil and natural gas operations. To better manage flaring and venting, we have a fuel, flare and vent management program aimed at improving the quality of measurement and reporting of flaring data to support better management.

- EM-04 Venting is a controlled release of natural gas into the atmosphere. In 2016, we had a decrease in venting in both our oil sands and conventional operations because we had fewer large venting events from plant disruptions than the previous year. A number of conventional facilities, which historically had higher venting rates, were also no longer in operation leading to lower venting emissions.
- EM-05 Our company-wide GHG emissions intensity increased mainly due to an increase in overall oil sands production, which has higher GHG emissions compared to our conventional oil and gas operations. Increasing GHG intensity at our oil sands assets also contributed to the year-over-year rise, which was, in part, caused by higher steam to oil ratios during the start-up of new phases.
- EM-06 The increase in indirect GHG emissions is due to increased electricity consumption across our oil sands facilities with the addition of Christina Lake phase F and Foster Creek Phase G expansion. This was offset in part by a decrease in indirect GHG emissions at our conventional oil and natural gas operations due to less demand for power associated with lower production.
- EM-07 In 2016, our company-wide energy use increased slightly. This was primarily due to a nine percent increase in oil sands energy use related to the start-up of new phases at our Foster Creek and Christina Lake oil sands operations. This increase was offset by a decrease in energy use at our conventional oil and natural gas operations, where reduced production meant less equipment was operated or that the equipment operated for fewer hours. The increase in energy use intensity in 2016 was primarily the result of higher energy use during the start-up of new phases at our oil sands operations.
- EM-08 Data for years prior to 2015 was not available at the time of reporting, but will be provided in future reporting years where possible.
- EM-09 We had lower methane emissions in 2016, mostly due to fewer large venting events resulting from plant disruptions (i.e. from power outages) than in the previous year. A number of conventional facilities, which historically had higher venting rates, were also no longer in operation leading to lower venting emissions.
- EM-10 Methodology based on CAPP Guide to Calculating Greenhouse Gas Emissions (CAPP, 2003) and guided by requirements of the Alberta Specified Gas Reporting Regulation, where applicable. CAPP 2014 Responsible Canadian Energy Metrics Guide (CAPP, 2014), and CAPP Guide: A Recommended Approach to Completing the National Pollutant Release Inventory (NPRI) for the Upstream Oil and Gas Industry (2007).
- EM-11 Values prior to 2015 have been restated to reflect more accurate reporting methodology.

Land			2012	2013	2014	2015	2016	2015-2016 % change	Footnote	GRI	Assurance
Total area under reclamation (hectares)			4,518	4,975	6,091	5,721	4,780	-16		EN13	-
Well site reclamation certificates received			87	101	67	59	184	212		EN13	-
Total wells undergoing active reclamation			2,115	2,787	3,236	3,617	3,743	3		EN13	-
Total reclaimed land (hectares)			257	271	288	155	1,136	633		EN13	-
Spills											
Reportable spills	Company wide	Total	108	114	119	133	108	-19	SP-02, SP-03	-	EY
		Hydrocarbon	43	45	51	53	40	-25	SP-02, SP-03	EN24	-
		Non-hydrocarbon	65	69	68	80	68	-15	SP-02, SP-03	-	-
	Oil Sands	Total	51	52	51	52	49	-6	SP-02, SP-03	-	-
		Hydrocarbon	11	7	5	14	13	-7	SP-02, SP-03	-	-
		Non-hydrocarbon	40	45	46	38	36	-5	SP-02, SP-03	-	-
Estimated reportable volume spilled (bbls)	Company wide	Total	5,029	6,147	9,744	11,143	4,496	-60	SP-02, SP-03	-	EY
		Hydrocarbon	1,413	2,468	4,686	1,027	1,318	28	SP-02, SP-03	EN24	-
		Non-hydrocarbon	3,616	3,680	5,058	10,116	3,178	-69	SP-02, SP-03	-	-
	Oil Sands	Total	1,678	3,267	5,710	5,178	1,803	-65	SP-02, SP-03	-	-
		Hydrocarbon	320	512	2,573	179	125	-30	SP-02, SP-03	-	-
		Non-hydrocarbon	1,358	2,754	3,137	4,998	1,678	-66	SP-02, SP-03	-	-
Waste			2012	2013	2014	2015	2016	% change	Footnote	GRI	Assurance
Waste (tonnes)	Company wide	Total	846,360	1,196,620	924,683	461,133	421,552	-9	WS-01	EN23	EY
		Hazardous	268,232	345,721	232,626	104,757	165,271	58	WS-01	EN23	EY
		Non-hazardous	578,128	850,899	692,057	356,376	256,280	-28	WS-01	EN23	EY
	Oil sands	Total	412,266	604,861	466,424	326,859	344,880	6	WS-01	-	-
		Hazardous	247,092	323,801	203,638	94,035	156,396	66	WS-01	-	-
		Non-hazardous	165,174	281,060	262,786	232,824	188,484	-19	WS-01	-	-
Water											
Fresh water use (bbls)	Company wide	Total	20,412,232	31,257,733	20,715,059	19,311,178	19,306,665	0	WT-01, WT-02	EN8	EY
		Production	10,030,035	12,328,423	13,592,081	14,373,939	15,297,749	6	WT-01, WT-02	-	-
		Non-	10,382,197	18,929,310	7,122,978	4,937,239	4,008,916	-19	WT-01, WT-02	-	-

		production									
	Oil Sands	Total	10,865,609	20,905,791	9,901,125	11,595,460	15,121,012	30	WT-01, WT-03	EN8	-
		Production	3,227,282	4,531,915	5,008,693	7,641,801	11,617,581	52	WT-01, WT-03	-	-
		Non-production	7,638,327	16,373,875	4,892,433	3,953,659	3,503,431	-11	WT-01, WT-03	-	-
Fresh water use intensity (bbls/BOE)	Company wide	Total	0.156	0.225	0.133	0.122	0.120	-2	WT-01, WT-02	-	-
		Production only	0.077	0.089	0.088	0.091	0.095	4	WT-01, WT-02	-	-
	Oil sands	Total	0.166	0.280	0.106	0.113	0.138	22	WT-01, WT-03	-	-
		Production only	0.049	0.061	0.054	0.075	0.106	41	WT-01, WT-03	-	-
Saline water use (bbls)	Company wide	Production only	65,472,940	71,189,034	79,713,427	68,975,259	50,018,934	-25	-	EN8	EY
	Oil sands	Production only	31,511,818	34,455,789	36,397,856	39,053,548	34,253,139	-6	-	EN8	-
Saline water use intensity (bbls/BOE)	Company wide	Production only	0.50	0.51	0.51	0.45	0.31	-26	-	-	-
	Oil sands	Production only	0.48	0.46	0.39	0.38	0.31	-14	-	-	-
Water withdrawals by source (bbls)	Company wide	Fresh surface water	4,639,365	4,663,076	4,560,579	3,196,499	2,480,398	-	-	EN8	-
		Fresh groundwater	15,772,867	26,594,657	16,146,305	16,310,949	16,826,201	-	-	EN8	-
		Saline groundwater	65,472,940	71,189,035	79,721,601	68,977,222	50,018,934	-	-	EN8	-

- SP-01 Reportable spill volume is the aggregate volume associated with all unintended liquid or solid releases to the environment greater than 2m³ on site; any amount that may have an adverse environmental effect or pose a danger to public safety; any amount not confined to a site; any release from a pipeline; or any release into a watercourse, groundwater or surface water. A hydrocarbon spill includes a liquid or solid component consisting of carbon and hydrogen molecules that are the principal constituents of petroleum products (both refined and unrefined). A non-hydrocarbon spill can include liquids and solids that are water, waste or chemical based, non-hydrocarbon refined products or other substances used in operations or generated as waste material.
- SP-02 Hydrocarbon and non-hydrocarbon count and volume have been restated to reflect a more comprehensive list of commodities included in the hydrocarbon category for 2015 and years prior. Restated Cenovus wide and oil sands hydrocarbon spill counts reflect a number of smaller volume spills being reclassified as hydrocarbon spills, while a small number of reclassified spills resulted in a greater of portion of spill volumes being classified as hydrocarbon.
- SP-03 2015 total spill count and volumes have been restated to reflect the inclusion of a single surface water release event that reflects more up to date information.
- WS-01 Less drilling and construction activity in 2016, combined with the results of focused improvement efforts initiated in previous years at our oil sands operations, has contributed to the reduction of hazardous and non-hazardous waste. Improvements continue to be made to the data collection process through an improved waste tracking system. In mid-2012, the Alberta Energy Regulator implemented a new directive containing more stringent land application criteria capturing more drilling waste volumes.
- WT-01 Production water use represents all the fresh water we used directly for oil production, not including water used for potable camp water, dust suppression, ice road construction and drilling. A reporting methodology change has resulted in a restatement of fresh water use and fresh water intensity numbers.
- WT-02 Fresh water is used across our operations for oil production as well as for non-production activities such as drilling, well completions, ice roads, dust control and at our camps. While our overall fresh water use and intensity remained about the same in 2016, our fresh water use and intensity for production activities increased from previous years. This increase was due to a greater need for fresh water at our oil sands operations. The increase was partially offset by a decrease in fresh water use at our conventional Pelican Lake enhanced oil recovery operations because of reduced polymer flooding activity.

WT-03 We used more fresh water at our oil sands operations in 2016 partly because of the need for additional steam during the start-up of new production phases at our Christina Lake operation. This occurred during a period when less produced water was available and less saline water could be used. Produced water is the water returned with the oil from our wells that we recycle to use for steam generation, while saline water comes from underground aquifers.

Innovation and efficiency		2012	2013	2014	2015	2016	% change	Footnote	GRI	Assurance
Research and development (R&D) capital spend (CAD\$ millions)		See footnote	See footnote	See footnote	91	69		IN-04; IN-05	-	-
Energy efficiency fund (CAD\$ millions)	Approved spend	4.0	2.0	2.0	1.0	0.0	-100	IN-02	-	-
	Actual spend	5.0	2.0	4.0	2.0	0.0	-100	IN-02	-	-
Employee Energy Efficiency Rebate Program participation	Rebates issued	500	746	378	542	477	-12	IN-03	-	-
Environmental impact reductions from Employee Energy Efficiency Rebate Program	GHG emissions (tonnes)	106	122	67	158	133	-16	IN-03	-	-
	Natural gas (GJ)	1,090	1,415	837	863	753	-13	IN-03	-	-
	Electricity (MWh)	48	55	27	133	127	-5	IN-03	-	-
	Water (m ³)	2,534	6,263	2,470	6,972	5,122	-27	IN-03	-	-
Steam to oil ratio (SOR)	Foster Creek	2.2	2.5	2.6	2.5	2.7	8	IN-06	-	-
	Christina Lake	1.9	1.9	1.8	1.7	1.9	12	IN-06	-	-

IN-01 The Cenovus Environmental Opportunity Fund program expenditures reflect commitments made in previous years. Newer investments are directed towards efforts through COSIA or are expected to occur via Evok Innovations.

IN-02 Since the inception of the Cenovus Energy Efficiency Fund in 2009, we have invested nearly \$30 million to support energy efficiency initiatives. Actual spend varies year over year due to our commitments to multi-year efficiency projects, where commitment spend depends on the execution stage of the projects. While we did not allocate budget for energy efficiency projects in 2016 and had reduced activity, we continue to evaluate opportunities to reduce energy consumption through energy efficiency retrofits as well as technology development.

IN-03 Environmental impact reductions estimated by the third-party program administrator. The Employee Energy Efficiency Rebate Program was discontinued in 2017.

IN-04 Total upstream technology development before deductions. Values reported are before deductions such as SR&ED tax credits and are gross (i.e. include partner share). A new reporting methodology has been adopted for 2015 onward and reflects the best available information at the time of this report. We will aim to provide restated 2014 historical values as this information becomes available.

IN-05 Due to confidentiality, Cenovus does not report forward-looking information on research, development and technology innovation expenditures.

IN-06 Steam to oil ratio (SOR) is the amount of steam it takes to produce a barrel of oil. A low SOR results in lower water usage, more efficient use of steam, a reduction of emissions per barrel of oil recovered and an overall reduction in operating costs.

**Benchmarking
Canadian Association of Petroleum Producers (CAPP) Responsible Canadian Energy (RCE) Program**

		2012	2013	2014	2015	2016	% change	Footnote	GRI	Assurance
Direct GHG emissions intensity (tonnes CO ₂ E/m ³ OE)	Western Canada and Oil sands	0.60	0.65	0.68	n/a	n/a	-	BM-01	-	-
	Oil sands	0.57	0.55	0.52	n/a	n/a	-	BM-01	-	-
NO _x emissions intensity (tonnes/thousand m ³ OE)	Western Canada and Oil sands	0.85	0.76	0.73	n/a	n/a	-	BM-01	-	-
	Oil sands	0.79	0.67	0.63	n/a	n/a	-	BM-01	-	-
SO ₂ emissions intensity (tonnes/thousand m ³ OE)	Western Canada and Oil sands	0.59	0.53	0.40	n/a	n/a	-	BM-01	-	-
	Oil sands	1.00	0.81	0.47	n/a	n/a	-	BM-01	-	-
Fresh water use intensity for production (bbls/BOE)	Oil sands	0.30	0.30	0.30	0.3	0.3	-	BM-01	-	-

BM-01 Source: Canadian Association of Petroleum Producers (CAPP) Responsible Canadian Energy (RCE) 2015 National Data Table. Note: Due to the timing of our data reporting programs, CAPP RCE data is one year behind our data. When benchmarking our performance, Cenovus compares our current year data with the most current CAPP RCE information available. When reporting CAPP RCE values, we only compare ourselves against oil sands and Western Canadian Sedimentary Basin (WCSB), and exclude values for Atlantic or Northern Canada regions. For Cenovus oil sands performance, we compare ourselves to CAPP RCE oil sands mining and in-situ for GHGs, NO_x and SO₂ and oil sands in-situ for fresh water use. For Cenovus-wide results, we compare ourselves to the weighted WCSB and oil sands average, using the oil sands segments as outlined above.

Oil sands in-situ (CSS, SAGD) and mining includes projects within Alberta. Saskatchewan SAGD projects for heavy oil are included in WCSB. All oil sands data includes in-situ and mining operations unless otherwise noted. WCSB includes conventional gas, light, medium and heavy oil, as well as Saskatchewan SAGD projects.

GHG, NO_x and SO₂ emissions based on data from CAPP members only. Bitumen oil equivalent production has been adjusted from original CAPP reported values to align with Cenovus's corporate responsibility intensity calculations which assume a ratio of 1.0 m³ bitumen to 1.0 m³ oil equivalent (m³OE) bitumen.

Fresh and saline water data is based on Government of Alberta data for all industry. Combined WCSB and oil sands is not provided as CAPP RCE reported values for Western Canada were not directly comparable with Cenovus reported values.

