

## Appendix B. GRI-G4 index (core option)

Category	GRI	Requirement	Source
Strategy & analysis	<a href="#">G4-1</a>	Provide a statement from the most senior decision maker of the organization about the relevance of sustainability to the organization and the organization's strategy for addressing sustainability.	CR report >> About us >> <a href="#">CEO message</a>
Organization profile	<a href="#">G4-3</a>	Report the name of the organization.	CR report 2016 Annual Information Form: pages 1, 3
Organization profile	<a href="#">G4-4</a>	Report the primary brands, products and services.	2016 Annual Information Form: pages 4-14 cenovus.com >> <a href="#">Our operations</a> CR report >> Our approach >> <a href="#">Our business</a>
Organization profile	<a href="#">G4-5</a>	Report the location of the organization's headquarters.	2016 Annual Information Form: page 3 cenovus.com >> <a href="#">About us</a> CR report >> Our approach >> <a href="#">Our business</a>
Organization profile	<a href="#">G4-6</a>	Report the number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report.	2016 Annual Information Form: pages 4-14 cenovus.com >> <a href="#">About us</a> CR report >> Our approach >> <a href="#">Our business</a> GRI-G4 index & supplement: <a href="#">Reporting boundaries</a>
Organization profile	<a href="#">G4-7</a>	Report the nature of ownership and legal form.	2016 Annual Information Form: page 3 CR report >> Our approach >> <a href="#">Our business</a> GRI-G4 index & supplement: <a href="#">Reporting boundaries</a>
Organization profile	<a href="#">G4-8</a>	Report the markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries).	cenovus.com >> Operations >> <a href="#">Marketing and transporting our oil</a> CR report >> Our approach >> <a href="#">Our business</a>
Organization profile	<a href="#">G4-9</a>	Report the scale of the organization including:	
		Total number of employees	Data table: Workforce
		Total number of operations	2016 Annual Information Form: pages 4-14 CR report >> Our approach >> <a href="#">Our business</a> GRI-G4 index & supplement: <a href="#">Reporting boundaries</a>
		Net sales (for private sector organizations)	Data table: Financial – Gross sales
		Total capitalization broken down in terms of debt and equity	Data table: Financial – Market capitalization
		Quantity of products or services provided	Data table: Production – Total gross production, total net production

Category	GRI	Requirement	Source
Organization profile	<a href="#">G4-10a</a>	Report the total number of employees by employment contract (permanent or fixed term/temporary) and gender.	This information was not readily available at the time of this report. We will assess the feasibility of providing this information in future reporting years.
Organization profile	<a href="#">G4-10b</a>	Report the total number of permanent employees by employment type (full-time/part-time) and gender.	In 2016, 99 percent of Cenovus employees were full-time and one percent were part-time. Employees working less than a 1.00 full-time equivalent are considered part-time.
Organization profile	<a href="#">G4-10c</a>	Report the total workforce by employees and supervised workers and by gender.	Data table: Workforce
Organization profile	<a href="#">G4-10d</a>	Report the total workforce by region and gender.	Data table: Workforce
Organization profile	<a href="#">G4-10e</a>	Report whether a substantial portion of the organization's work is performed by workers who are legally recognized as self-employed, or by individuals other than employees or supervised workers, including employees and supervised employees of contractors.	This information was not readily available at the time of this report. We will assess the feasibility of providing this information in future reporting years.
Organization profile	<a href="#">G4-10f</a>	Report any significant variations in employment numbers (such as seasonal variations in employment in the tourism or agricultural industries).	No significant seasonal variations in employment numbers occur in our operations.
Organization profile	<a href="#">G4-11</a>	Report the percentage of total employees covered by collective bargaining agreements.	Cenovus does not have any employees covered by collective bargaining agreements.
Organization profile	<a href="#">G4-12</a>	Describe the organization's supply chain.	CR report >> Economy >> <a href="#">Our supply chain</a>
Organization profile	<a href="#">G4-13</a>	Report any significant changes during the reporting period regarding the organization's size, structure, ownership or its supply chain, including:	
		Changes in the location of, or changes in operations, including facility openings, closings and expansions.	2016 Annual Information Form: page 5
		Changes in the share capital structure and other capital formation, maintenance and alteration operations (for private sector organizations).	2016 Annual Information Form: page 3
		Changes in the location of suppliers, the structure of the supply chain, or in relationships with suppliers, including selection and termination.	CR report >> Community >> <a href="#">Aboriginal relations</a> Economy >> Our supply chain for additional information.

Organization profile	<a href="#">G4-14</a>	Report whether and how the precautionary approach or principle is addressed by the organization.	Cenovus Energy Inc. Management's Discussions and Analysis for the Year Ended December 31, 2015: Risk Management pages 33-37.
Organization profile	<a href="#">G4-15</a>	List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses.	GRI-G4 index & supplement: Economic, environmental and social charters, principles, or other initiatives
Organization profile	<a href="#">G4-16</a>	List memberships of associations (such as industry associations) and national or international advocacy organizations in which the organization: <ul style="list-style-type: none"> <li>• Holds a position on the governance body</li> <li>• Participates in projects or committees</li> <li>• Provides substantive funding beyond routine membership dues</li> <li>• Views membership as strategic</li> </ul> This refers primarily to memberships maintained at the organizational level.	CR report >> Our approach >> <a href="#">Engagement</a>
Identified material aspects and boundaries	<a href="#">G4-17a</a>	List all entities included in the organization's consolidated financial statements or equivalent documents.	2016 Annual Information Form: pages 3-14 cenovus.com >> <a href="#">About us</a> CR report >> Our approach >> <a href="#">Our business</a> GRI-G4 index & supplement: <a href="#">Reporting boundaries</a>
Identified material aspects and boundaries	<a href="#">G4-17b</a>	Report whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report. The organization can report on this Standard Disclosure by referencing the information in publicly available consolidated financial statements or equivalent documents.	GRI-G4 index & supplement: <a href="#">Reporting boundaries</a> , <a href="#">Operating definitions</a>
Identified material aspects and boundaries	<a href="#">G4-18a</a>	Explain the process for defining the report content and the Aspect Boundaries.	GRI-G4 index & supplement: <a href="#">Reporting boundaries</a> , <a href="#">Operating definitions</a> CR report >> Our approach >> <a href="#">Material topics and our approach to reporting</a>
Identified material aspects and boundaries	<a href="#">G4-18b</a>	Explain how the organization has implemented the Reporting Principles for Defining Report Content.	CR report >> Our approach >> <a href="#">Material topics and our approach to reporting</a> CR report >> <a href="#">Report documents</a>
Identified material aspects and boundaries	<a href="#">G4-19</a>	List all the material Aspects identified in the process for defining report content.	GRI-G4 index & supplement: <a href="#">Material issue summary</a>

Identified material aspects and boundaries	<a href="#">G4-20</a>	<p>For each material Aspect, report the Aspect Boundary within the organization, as follows:</p> <ul style="list-style-type: none"> <li>• Report whether the Aspect is material within the organization</li> <li>• If the Aspect is not material for all entities within the organization (as described in G4-17), select one of the following two approaches and report either: <ul style="list-style-type: none"> <li>○ the list of entities or groups of entities included in G4-17 for which the Aspect is not material or</li> <li>○ the list of entities or groups of entities included in G4-17 for which the Aspects is material</li> <li>○ report any specific limitation regarding the Aspect Boundary within the organization</li> </ul> </li> </ul>	GRI-G4 index & supplement: <a href="#">Material issue summary</a>
Identified material aspects and boundaries	<a href="#">G4-21</a>	<p>For each material Aspect, report the Aspect Boundary outside the organization, as follows:</p> <ul style="list-style-type: none"> <li>• Report whether the Aspect is material outside of the organization</li> <li>• If the Aspect is material outside of the organization, identify the entities, groups of entities or elements for which the Aspect is material</li> <li>• In addition, describe the geographical location where the Aspect is material for the entities identified</li> <li>• Report any specific limitation regarding the Aspect Boundary outside the organization</li> </ul>	GRI-G4 index & supplement: <a href="#">Material issue summary</a>
Identified material aspects and boundaries	<a href="#">G4-22</a>	Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements.	All restatements are referenced in data table footnotes and associated charts, where applicable.
Identified material aspects and boundaries	<a href="#">G4-23</a>	Report significant changes from previous reporting periods in the Scope and Aspect Boundaries.	The Bruderheim crude-by-rail terminal has been added to the scope and boundary for Aspects where it is material.
Stakeholder engagement	<a href="#">G4-24</a>	Provide a list of stakeholder groups engaged by the organization.	CR report >> Our approach >> <a href="#">Engagement</a>
Stakeholder engagement	<a href="#">G4-25</a>	Report the basis for identification and selection of stakeholders with whom to engage.	CR report >> Our approach >> <a href="#">Engagement</a>
Stakeholder engagement	<a href="#">G4-26</a>	Report the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.	CR report >> Our approach >> <a href="#">Engagement</a> CR report >> Our approach >> <a href="#">Material topics and our approach to reporting</a>
Stakeholder engagement	<a href="#">G4-27</a>	Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns.	CR report >> Our approach >> <a href="#">Engagement</a>
Report profile	<a href="#">G4-28</a>	Reporting period (such as fiscal or calendar year) for information provided.	January 1, 2016 to December 31, 2016
Report profile	<a href="#">G4-29</a>	Date of most recent previous report (if any).	July 15, 2016

Report profile	<a href="#">G4-30</a>	Reporting cycle (such as annual, biennial).	Annual
Report profile	<a href="#">G4-31</a>	Provide the contact point for questions regarding the report or its contents.	Email: <a href="mailto:corporate.responsibility@cenovus.com">corporate.responsibility@cenovus.com</a>
Report profile	<a href="#">G4-32a</a>	Report the 'in accordance' option the organization has chosen.	GRI-G4 core
Report profile	<a href="#">G4-32b</a>	Report the GRI Content Index for the chosen option.	GRI-G4 index document
Report profile	<a href="#">G4-32c</a>	Report the reference to the External Assurance Report, if the report has been externally assured. GRI recommends the use of external assurance but it is not a requirement to be 'in accordance' with the Guidelines.	CR report >> <a href="#">Report documents</a> EY assurance statement
Report profile	<a href="#">G4-33a</a>	Report the organization's policy and current practice with regard to seeking external assurance for the report.	Internal commitment to seek assurance CR report >> <a href="#">Report documents</a>
Report profile	<a href="#">G4-33b</a>	If not included in the assurance report accompanying the sustainability report, report the scope and basis of any external assurance provided.	CR report >> <a href="#">Report documents</a> EY assurance statement GRI Index
Report profile	<a href="#">G4-33c</a>	Report the relationship between the organization and the assurance providers.	CR report >> <a href="#">Report documents</a> EY assurance statement
Report profile	<a href="#">G4-33d</a>	Report whether the highest governance body or senior executives are involved in seeking assurance for the organization's sustainability report.	Vice-President Environment & Sustainability is involved in seeking assurance for the sustainability report.
Governance	<a href="#">G4-34</a>	Report the governance structure of the organization, including committees of the highest governance body. Identify any committees responsible for decision-making on economic, environmental and social impacts.	CR report >> <a href="#">Governance 2017 Management Information Circular</a> <a href="#">cenovus.com</a> >> <a href="#">Our Board</a>
Ethics and integrity	<a href="#">G4-56</a>	Describe the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics.	CR report >> Governance >> <a href="#">Addressing concerns about our work</a> CR report >> Our approach >> <a href="#">Leadership and corporate responsibility</a> CR report >> <a href="#">Governance</a> CR report >> Our people >> <a href="#">Our workforce</a>

## Appendix C. Material issue summary

Listing of category/issue and does not reflect or imply a ranking of importance.

- a. Denotes relevant GRI Oil and Gas Sector Disclosures Aspect or indicator. Cenovus is not reporting to the O&G Sector Disclosures standard, but has referenced these for the convenience of the reader.

Cenovus category	Relevant topic	Reference for DMA content	GRI Indicator		Notes	GRI Aspect	GRI category
Community	<b>Stakeholder and Aboriginal engagement</b>	Our approach >> Engagement	G4-SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	Integrity Helpline, Expect Respect program, project assessments(EIAs) and engagement are included. Community development programs were not included in the current reporting year.	Local communities	Social - Society
	<b>Community affairs</b>	Our approach >> Engagement	G4-SO11	Number of grievances about impacts on society filed, addressed and resolved through formal grievance mechanisms	Several long-term agreements we have entered into with different local Aboriginal communities have formal dispute-resolution processes. Any disputes, should they occur, are not disclosed due to confidentiality requirements of those agreements.  Our Integrity Helpline is used for stakeholders to raise concerns about our operations. We report the number of intakes each year in our CR report.	Grievance mechanisms for impacts on society	
	<b>Government affairs</b>	Governance >> Addressing concerns about our work	G4-SO6	Total value of political contributions by country and recipient/beneficiary	Only total value of political contributions by country is reported.	Public policy	
Leadership, governance & business practices	<b>Business ethics</b>	Governance		Business conduct investigations	This material issue was identified by Cenovus and does not align with an existing GRI Aspect.	n/a	n/a
	<b>Innovation</b>	Innovation	n/a	R&D expenditures	This material issue was identified by Cenovus and does not align with an existing GRI Aspect.	n/a	n/a
	<b>Economic impact (including market access)</b>	Economy	G4-EC1	Direct economic value generated and distributed	Payments to providers of capital not currently reported.	Economic performance	Economy

Cenovus category	Relevant topic	Reference for DMA content	GRI Indicator		Notes	GRI Aspect	GRI category
	<b>Supply chain management; local/Aboriginal spending</b>	Economy >> Our supply chain	G4-EC9	Proportion of spending on local suppliers at significant locations of operation	Limited to local Aboriginal spend.	Procurement practices	Economy
People	<b>Employee engagement/development</b>	Our people	G4-LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership and other indicators of diversity	Cenovus does not track employees and governance body members by minority group.	Diversity & equal opportunity	Social – Labour practices & decent work
			G4-LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	Cenovus has 100 percent coverage in this indicator and therefore a split of employee category and gender are not provided.	Training & education	
	<b>Employee health and safety; public health and safety</b>	Our people >> Safety Our people >> Occupational health & wellness	G4-LA6	Type of injury and rates of injury, occupational diseases, lost days and absenteeism, and total number of work-related fatalities, by region and by gender	Overall injury rates and fatalities reported. Not reported by type of injury, gender or region.	Occupational health & safety	Social – Labour practices & decent work
			OG-13 <sup>a</sup>	Tier 1 and Tier 2 process safety events	-	Asset integrity and process safety <sup>a</sup>	Social - Society
			n/a	No indicators are associated with the GRI-G4 emergency preparedness GRI Aspect	-	Emergency preparedness <sup>a</sup>	
	Environmental performance	<b>Cumulative impacts/pace of development</b>	Environment >> Emissions, energy use & air quality Environment >> Land use & biodiversity	n/a	n/a	This material issue was identified by Cenovus and does not align with an existing GRI Aspect.	n/a

Cenovus category	Relevant topic	Reference for DMA content	GRI Indicator		Notes	GRI Aspect	GRI category
	<b>Energy efficiency</b>	Environment >> Emissions, energy use & air quality  Innovation	G4-EN3	Energy consumption within the organization	Fuel consumption of renewables, energy sold not reported.	Energy	Environment
			G4-EN5	Energy intensity	-		
	<b>Greenhouse gas emissions, air emissions</b>	Environment >> Emissions, energy use & air quality  Innovation	G4-EN15	Direct greenhouse gas emissions (scope 1)	No biogenic greenhouse gas emissions occur within reporting boundary.	Emissions	
			G4-EN16	Energy indirect greenhouse gas emissions (scope 2)			
			G4-EN18	Greenhouse gas emissions intensity	Scope 1 and scope 2 are reported.		
			G4-EN21	NOx, SOx and other significant air emissions	Persistent organic pollutants, hazardous air pollutants and particulate matter not reported.		
	<b>Spills</b>	Environment >> Spills	G4-EN24	Total number and volume of significant spills	-		
	<b>Waste</b>	Governance >> Operations management	G4-EN23	Total weight of waste by type and disposal method	While a management approach for waste is not specifically referenced as a distinct section of the report, we manage waste as an issue within the Cenovus Operations Management System (COMS). COMS helps to enable our operations groups to more systematically identify risks and implement continuous improvement efforts in this area. While total hazardous and non-hazardous waste is reported, specific disposal methods are not reported.	Effluents and waste	
<b>Water</b>	Environment >> Water	G4-EN8	Total water withdrawal by source	Only fresh surface, fresh groundwater and saline groundwater are reported as significant sources of water withdrawals.	Water		
<b>Land use and biodiversity</b>	Environment >> Land use & biodiversity	G4-EN13	Habitats protected or restored	Only areas restored under site reclamation programs are reported. Protected areas, interim reclamation and Linear Deactivation (LiDea) are not reported.	Biodiversity		



## Appendix D. Reporting boundaries

a – Details of Cenovus Energy Inc. and its intercorporate relationships are provided in the Cenovus Energy Inc. 2016 Annual Information Form

b – Cenovus reports operating areas where it has both a financial stake and is the operator in the CR report

c – While not reported in the AIF as a partnership or subsidiary, COSIA and Evok Innovations where considered as our investments in these organizations, are included in the report

Corporate entity	Operations during 2016 associated with entity	Region where operations exist	Financial stake/ ownership role	Operator	Inclusion in report
<b>Cenovus Energy Inc.</b>	Conventional oil and natural gas operations and some oil sands projects including Grand Rapids, Telephone Lake and emerging oil sands projects as listed in the AIF <sup>a</sup>	Alberta Saskatchewan	Yes	Yes	Included in report boundary for all topics.
	Deep Basin assets (acquired in 2017)	Alberta British Columbia	Not during reporting period (2016 fiscal year)	Not during reporting period (2016 fiscal year)	This recent acquisition (closed May 17, 2017) is referenced in the report, however KPIs and management of issues for 2016 do not include Deep Basin.
	Bruderheim crude-by-rail terminal to transport crude oil	Alberta	Yes	No (operated by third party)	Included in spills topic.
<b>Intercorporate relationships as listed in the AIF<sup>a</sup></b>					
<b>Cenovus FCCL Ltd.</b>	Foster Creek, Christina Lake and Narrows Lake projects	Alberta	Yes	Yes	Included in report boundary for all topics.
<b>Cenovus Energy Marketing Services Ltd.</b>	Marketing operation in the U.S. to buy and sell oil, arrange transportation/trade in derivatives. This entity also holds some office leases, such as Cenovus head office in Calgary.	Calgary, Alberta and Houston, Texas	Yes	No	Generally excluded as the office operations are not material activities relating to exploration, construction, production and decommissioning. Cenovus does in some cases charter shipments of our crude oil, but the operator of those shipment vessels are external third parties.
<b>Cenovus US Holdings Inc.</b>	Refer to WRB Refining LP	Refer to WRB Refining LP	Yes	Refer to WRB Refining LP	Holds Cenovus interest in WRB Refining LP.
<b>FCCL Partnership ("FCCL")</b>	Refer to Cenovus FCCL Ltd.	Refer to Cenovus FCCL Ltd.	Yes	Refer to Cenovus FCCL Ltd.	See Cenovus FCCL Ltd. FCCL Partnership held Cenovus's interest in Cenovus FCCL Ltd. which is the FCCL operator and managing partner.
<b>WRB Refining LP ("WRB")</b>	Wood River (IL) and Borger (TX) refineries	Illinois Texas	Yes	No (Phillips 66 is the operator)	Excluded as Cenovus is not the operator of this facility.

Corporate entity	Operations during 2016 associated with entity	Region where operations exist	Financial stake/ ownership role	Operator	Inclusion in report
<b>Other organizations related to Cenovus Energy Inc. considered during boundary determination of the CR report</b>					
<b>Evok Innovations</b>	Investment partnership, along with Suncor Energy and the BC Cleantech CEO Alliance formed to connect the energy industry and the global clean technology community.	Offices are located in Vancouver, British Columbia	Yes	No	Activities relating to investments are discussed as part of the management approach to environment related issues.
<b>Canada's Oil Sands Innovation Alliance (COSIA)</b>	Alliance of oil sands producers focused on accelerating the pace of improvement in environmental performance in Canada's oil sands through collaborative action and innovation.	Offices are located in Calgary, Alberta	Yes	No	Activities relating to investments are discussed as part of the management approach to environment related issues.

## Appendix E. Operating region definitions and related products/services considered in the reporting boundaries <sup>a</sup>

Cenovus reports operating areas where it has both a financial stake and is the operator in the CR report as outlined in Section C above

- a) "Oil sands" performance in our CR report differs from term used in the AIF under *Description of the Business* in that it only measures for operating activities associated with bitumen production as included
- b) Gas production from the Athabasca gas field is excluded from the CR oil sands category
- c) Community development program (GRI-G4 definition): Plan that details actions to minimize, mitigate, and compensate for adverse social and economic impacts, and to identify opportunities and actions to enhance positive impacts of the project on the community
- d) Cenovus Energy Inc. 2016 Annual Information Form

Group as reported in AIF <sup>b</sup>	Operating area	Status	Reportable segment in AIF <sup>b</sup>	Primary product	CAPP RCE category	CR oil sands category <sup>c</sup>	Reporting notes
Conventional Alberta	Deep Basin	Not within scope of report for 2016 fiscal reporting period		Natural gas, natural gas liquids and oil	WCSB	Not included in KPIs for this reporting period	Cenovus became the operator of Deep Basin assets in 2017. Therefore, Deep Basin activities are not included within the scope of this report.
	Grassland, Langevin, Pelican Lake, Suffield, Wainwright,	Producing	Conventional	Natural gas, natural gas liquids and oil	WCSB	No	Pelican Lake refers to the polymer flood heavy oil operation and is distinct from the Grand Rapids SAGD pilot.
Conventional Saskatchewan	Weyburn, Bakken	Producing	Conventional	Oil	WCSB	No	
Oil sands	Athabasca Gas	Producing	Oil sands	Natural gas	WCSB	No	Excluded from the CR report <i>oil sands</i> category in order to be more fully representative of bitumen versus non-bitumen related performance.
	Foster Creek	Producing	Oil sands	Bitumen	In-situ oil sands	Yes	Athabasca Gas and Foster Creek operating areas overlap.
	Christina Lake	Producing	Oil sands	Bitumen	In-situ oil sands	Yes	
	Narrows Lake	Not producing	Oil sands	Bitumen	In-situ oil sands	Yes	
	Grand Rapids (SAGD pilot)	Producing (pilot)	Oil sands	Bitumen	In-situ oil sands	Yes	The Grand Rapids SAGD pilot is sometimes referred to as the Pelican Lake Grand Rapids SAGD pilot in other public documents. This asset produces bitumen and is distinct from the Pelican Lake heavy oil polymer flood operation noted above. The pilot was shut down in 2016.
	Telephone Lake	Not producing	Oil sands	Bitumen	In-situ oil sands	Yes	
	Other emerging assets	Not producing	Oil sands	Bitumen	In-situ oil sands	Yes	
Transport	Bruderheim	Operating	Refining and marketing	Crude-by-rail transport	n/a	No	

