CDP

CDP 2017 Climate Change 2017 Information Request Molson Coors Brewing Company

Module: Introduction

Page: Introduction

CC0.1

Introduction

Please give a general description and introduction to your organization.

Molson Coors' Board and Executive Leadership Team have identified world class corporate responsibility performance as one of the four drivers of our global business strategy. Consistent with this commitment we are responding to the Carbon Disclosure Project for the eighth year. As a major global brewer, we are committed to cost effective improvements in our operations that result in more efficient use of energy, reductions in GHG emissions and improvements in our environmental performance.

Molson Coors is a leading brewer in Canada through Molson Coors Canada and in Europe though Molson Coors Europe (U.K. & Ireland, Czech Republic and six other countries), and since our acquisition of MillerCoors, Molson Coors is also now the second largest brewer in the U.S. We have a growing presence in India through our Molson Coors International operations which also markets beer in many other markets around the world.

In June of 2012, Molson Coors acquired the Starbev group comprising of 9 breweries throughout Central and Eastern Europe. As a result of the acquisition, the UK operations and the former Starbev (hereto referred to as 'New Central European Breweries') operations have been grouped into a single European Business Unit as of January 1st, 2013.

MillerCoors became a fully owned Molson Coors company in October 2016, following Molson Coors' purchase of SABMiller plc's remaining 58% stake in the business. We will continue to report 42% of MillerCoors GHG emissions in our CDP submission for 2016. We will cover 100% of MillerCoors data in next year's submission, after one full year of ownership. MillerCoors is excluded from our consolidated reporting of scope 1 and 2 emissions but is included as 'Significant Investments' under Scope 3 for the purposes of transparency.

Molson Coors has also evaluated and disclosed climate change risk to investors in our 10-K (included in the attachments), website and sustainability report.

Reporting Year

Please state the start and end date of the year for which you are reporting data.

The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first.

We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here. Work backwards from the most recent reporting year.

Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

Enter Periods that will be disclosed

Fri 01 Jan 2016 - Sat 31 Dec 2016

CC0.3

Country list configuration

Please select the countries for which you will be supplying data. If you are responding to the Electric Utilities module, this selection will be carried forward to assist you in completing your response.

Select country
Canada
United States of America
United Kingdom
India
Croatia
Serbia
Hungary
Romania
Bulgaria

Select country Czech Republic Montenegro

CC0.4

Currency selection

Please select the currency in which you would like to submit your response. All financial information contained in the response should be in this currency.

USD(\$)

Ireland

CC0.6

Modules

As part of the request for information on behalf of investors, companies in the electric utility sector, companies in the automobile and auto component manufacturing sector, companies in the oil and gas sector, companies in the information and communications technology sector (ICT) and companies in the food, beverage and tobacco sector (FBT) should complete supplementary questions in addition to the core questionnaire.

If you are in these sector groupings, the corresponding sector modules will not appear among the options of question CC0.6 but will automatically appear in the ORS navigation bar when you save this page. If you want to query your classification, please email respond@cdp.net.

If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below in CC0.6.

Further Information

Annual Report on Form 10K is attached.

Attachments

https://www.cdp.net/sites/2017/48/12348/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC0.Introduction/Annual Report on Form 10K.pdf

Module: Management

Page: CC1. Governance

CC1.1

Where is the highest level of direct responsibility for climate change within your organization?

Board or individual/sub-set of the Board or other committee appointed by the Board

CC1.1a

Please identify the position of the individual or name of the committee with this responsibility

As a committee appointed by the Board, the Corporate Responsibility Steering Group (CRSG) is responsible for climate change and other sustainability issues within Molson Coors. The CRSG is comprised of members of the Executive Leadership Team (the highest level of management within the organisation) and nominated senior management representatives from each business unit. As a member of the CRSG and Executive Leadership Team, the Global Chief Legal and Corporate Affairs Officer is accountable for reporting progress to the Board of Directors which independently reviews and approves the overall Corporate Responsibility Plan biannually. The CR Plan includes action on GHG mitigation and climate risk management.

In addition to the Council, a specific governance structure was put into place in 2013 to oversee the implementation within Supply Chain of the Enterprise Sustainability Strategy and track results. The Global Supply Chain Leadership Team (GSCLT), comprised of the Chief Supply Chain Officers from each Business Unit and the Global Chief Supply Chain Officer along with other functional VPs within Supply Chain, meet regularly to discuss resourcing of the strategic initiatives defined in the Global Sustainability Strategy and progress against the 2020 targets. The actual implementation of these initiatives is led by the Global Sustainability Technical Working Group (GSTWG) with representation from Senior Technical Services and Utilities Managers in each Business Unit. The GSTWG will report progress into the GSCLT every six months

Do you provide incentives for the management of climate change issues, including the attainment of targets?

Yes

CC1.2a

Please provide further details on the incentives provided for the management of climate change issues

Who is entitled to benefit from these incentives?	n these incentives? incentives performance indicator		Comment				
Board/Executive board	executive team Teward Energy reduction target target Efficiency target Energy reduction target Efficiency target		Incentives based on the following KPI: i) Energy used per hectolitre of production (Mass both a cost and GHG intensity indicator. ii) A water consumption per hl of production metric as sustainability and climate risk indicator.				
Corporate executive team			.Incentives based on the following KPI: i) Energy used per hectolitre of production (MJ/hI) as both a cost and GHG intensity indicator. ii) A water consumption per hI of production metric as sustainability and climate risk indicator.				
Chief Executive Officer Monetary project		Energy reduction project Efficiency target	Incentives based on the following KPI: i) Energy used per hectolitre of production (MJ/ as both a cost and GHG intensity indicator. ii) A water consumption per hl of production metric as sustainability and climate risk indicator.				
Chief Operating Officer (COO)	Monetary reward	Energy reduction target Efficiency target Other: Sustainability system performance Indicator	Incentives based on the following KPI: i) Energy used per hectolitre of production (MJ/hI) as both a cost and GHG intensity indicator. ii) A water consumption per hI of production metric as sustainability and climate risk indicator. The COO also has a target to achieve improvements in audited performance in our World Class Supply Chain program which includes a sustainability system block. This results in monetary reward being tied to all production sites improving energy/GHG/water and waste management systems.				
Management group	Energy reduc		Incentives based on the following KPI: i) Energy used per hectolitre of production (MJ/hl) as both a cost and GHG intensity indicator. ii) A water consumption per hl of production metric as sustainability and climate risk indicator. The Management Group within Supply Chain also has a target to achieve improvements in audited performance in our World Class Supply Chain program which includes a sustainability system block. This results in monetary reward being tied to all production sites improving energy/GHG/water and waste management systems.				

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
Business unit managers	Monetary reward	Energy reduction target Efficiency target	Incentives based on the following KPI: i) Energy used per hectolitre of production (MJ/hI) as both a cost and GHG intensity indicator. ii) A water consumption per hI of production metric as sustainability and climate risk indicator. Business Unit Managers also have a target to achieve improvements in audited performance in our World Class Supply Chain program which includes a sustainability system block. This results in monetary reward being tied to all production sites improving energy/GHG/water and waste management systems.
Energy managers	Monetary reward	Energy reduction target Efficiency target Other: Behaviour change related indicator	Incentives based on the following KPI: i) Energy used per hectolitre of production (MJ/hl) as both a cost and GHG intensity indicator. ii) A water consumption per hl of production metric as sustainability and climate risk indicator. Energy Managers also have a target to achieve improvements in audited performance in our World Class Supply Chain program which includes a sustainability system block. This results in monetary reward being tied to all production sites improving energy/GHG/water and waste management systems.
Other: Environment/sustainability managers	Monetary reward	Energy reduction target Other: Behaviour change related indicator	Incentives based on the following KPI: i) Energy used per hectolitre of production (MJ/hl) as both a cost and GHG intensity indicator. ii) A water consumption per hl of production metric as sustainability and climate risk indicator. iii) Performance in external benchmarking indices such as CDP and DJSI to ensure we are meeting stakeholder expectations on climate change and sustainability. Environment and Sustainability Managers also have a target to achieve improvements in audited performance in our World Class Supply Chain program which includes a sustainability system block. This results in monetary reward being tied to all production sites improving energy/GHG/water and waste management systems.
Facility managers	Monetary reward	Energy reduction project	Incentives based on the following KPI: i) Energy used per hectolitre of production (MJ/hl) as both a cost and GHG intensity indicator. ii) A water consumption per hl of production metric as sustainability and climate risk indicator. Facilities Managers within Supply Chain also have a target to achieve improvements in audited performance in our World Class Supply Chain program which includes a sustainability system block. This results in monetary reward being tied to all production sites improving energy/GHG/water and waste management systems.
Process operation managers	Monetary reward	Energy reduction target Efficiency target	Incentives based on the following KPI: i) Energy used per hectolitre of production (MJ/hl) as both a cost and GHG intensity indicator. ii) A water consumption per hl of production metric as sustainability and climate risk indicator. Process Operations Managers also have a target to achieve improvements in audited performance in our World Class Supply Chain program which includes a sustainability system block. This results in monetary reward being tied to all production sites improving energy/GHG/water and

Who is entitled to benefit from these incentives?	from these incentives? incentives performance indicator		Comment		
			waste management systems.		
Public affairs managers	Public affairs managers Monetary reward Energy reduction target Efficiency target Energy reduction target Efficiency target Energy reduction target Efficiency target		Incentives based on the following KPI: i) Energy used per hectolitre of production (MJ/hl) as both a cost and GHG intensity indicator. ii) A water consumption per hl of production metric as sustainability and climate risk indicator. iii) Performance in external benchmarking indices such as CDP and DJSI to ensure we are meeting stakeholder expectations on climate change and sustainability. Public Affaires Managers also have a target to achieve improvements in audited performance in our World Class Supply Chain program which includes a sustainability system block. This results in monetary reward being tied to all production sites improving energy/GHG/water and waste management systems.		
Risk managers			Incentives based on the following KPI: i) Energy used per hectolitre of production (MJ/I as both a cost and GHG intensity indicator. ii) A water consumption per hl of production metric as sustainability and climate risk indicator. iii) Performance in external benchmarking indices such as CDP and DJSI to ensure we are meeting stakeholder expectations on climate change and sustainability. Risk Managers also have a target to achieve improvements in audited performance in our World Class Supply Chain progra which includes a sustainability system block. This results in monetary reward being tied to all production sites improving energy/GHG/water and waste management systems.		
All employees	Recognition (non- monetary)	Energy reduction target Efficiency target	Incentives based on the following KPI: i) Energy used per hectolitre of production (MJ/hl) as both a cost and GHG intensity indicator. ii) A water consumption per hl of production metric as sustainability and climate risk indicator.		

Further Information

Page: CC2. Strategy

CC2.1

Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities

Integrated into multi-disciplinary company wide risk management processes

CC2.1a

Please provide further details on your risk management procedures with regard to climate change risks and opportunities

Frequency of monitoring	To whom are results reported?	Geographical areas considered	How far into the future are risks considered?	Comment
Six-monthly or more frequently	Board or individual/sub-set of the Board or committee appointed by the Board	Risks and Opportunities our managed though our Enterprise Risk Management Process which covers our entire supply chain across the 12 countries in which we operate breweries as well as the many other countries in which we market our beer.	> 6 years	Our ERM process has a 3 year horizon. However, in 2013 Molson Coors significantly reinforced its risk monitoring and management procedures by building risk and opportunities identification and mitigation planning into our management systems. The 'Our Beer Print' Pillar of our World Class Supply Chain program has a specific pillar on 'Active Risks & Opportunities Management' and requires individual sites to maintain a registry of all climate, energy, water and waste risks & opportunities and to create and resource mitigation plans for those considered material. The horizon for risk monitoring in this program is out to 30 years to correspond with asset renewal cycles. Sites were audited in 2016 on the completeness of the registry and progress towards plans.

CC2.1b

Please describe how your risk and opportunity identification processes are applied at both company and asset level

Climate risks and opportunities are assessed in 3 integrated processes: 1) Our ERM, which operates at several levels (asset, business unit, enterprise); 2) site level procedure for Risks and Opportunities management within the Our Beer Print Pillar of our World Class Supply Chain program; and 3) long-range scenario planning on sustainability impacts to the business. With respect to this last process, we undertook a sustainability scenario planning exercise in 2015 and have used the outcome (much of which related to the impacts of climate change) to inform our activities in Procurement, Corporate Strategy, Innovation and Supply Chain.

ERM:

At business unit level, the senior manager responsible for ERM interviews all the executives and compiles a report of identified risks & opportunities, including those related to climate. The process identifies climate risks and opportunities by means of subject matter knowledge of functional specialists, management systems

reviews, interaction with trade associations, monitoring of political and media issues (through a third party) and engagement with stakeholders. The business unit CEO reviews and approves the report, after which it is disseminated to all the CEO's direct reports before then being submitted to the Enterprise Leadership Team (ELT) where it is further developed and reviewed before being presented to the Board of Directors for approval.

Every risk has an owner who is accountable for mitigation plans. Priorities are established at company and local level based upon magnitude and the time horizon of each risk.

Our Beer Print Pillar:

In the Risks and Opportunities Procedure (see attached) within the 'Our Beer Print' Pillar, site level personnel are required to review climate, energy, water and waste related risks with a 30 year horizon within a multi-disciplinary group. Risks and opportunities identified are recorded in a registry and mitigation plans must be developed and resourced to address significant risks.

CC2.1c

How do you prioritize the risks and opportunities identified?

Priorities are established at company and local level based upon magnitude and the time horizon of each risk. Criteria for determining materiality/priorities:

- Molson Coors uses risk heat maps and sensitivity/stress analysis to determine the frequency, severity and timeline of risks (see ERM Heat Map attached).
- The ERM process categorizes all risks on a 4x4 matrix of frequency and severity, which is measured in terms of the effect to MCBC's market capitalization.
- Mitigation efforts are prioritized for the highest risks.
- Building on the ERM process and specific to sustainability, production sites prioritize risks that are monitored as part of the Our Beer Print Risks & Opportunities procedure by planning for mitigation measures within their Site Sustainability Strategies. These strategies involve an integrated planning exercise with a 2020 timeframe that requires the site to plan actions to address material risks to the site.

CC2.1d

Please explain why you do not have a process in place for assessing and managing risks and opportunities from climate change, and whether you plan to introduce such a process in future

Main reason for not having a process	Do you plan to introduce a process?	Comment

Is climate change integrated into your business strategy?

Yes

CC2.2a

Please describe the process of how climate change is integrated into your business strategy and any outcomes of this process

- i) How the strategy has been influenced? First and foremost, our business strategy is linked to our global 2020 energy and GHG reduction targets. As a result, we have a Global Sustainability Strategy that is an integral part of our business strategy and sets out our ambitions on how we will achieve our 2020 targets and reduce risk exposure. We also have adapted our Procurement policy to take into account climate and water risk in our Supply Chain in sourcing raw materials. Finally, we have adapted our packaging, brewing and technology innovation to aim for a lower product footprint for carbon and water.
- ii) The aspects of climate change that have influenced our strategy are several; from changing consumer attitudes and customer requirements to changes in water availability and risks to agricultural raw materials. To be more specific, the risk of greater stress on water resources led us to change our strategy on reducing water intensities. It also led us to adopting supplier sustainability standards to mitigate water related risks to the supply of agricultural raw materials.
- iii) How has the short term strategy been influenced by climate change?

Rising energy prices and risks have caused us to focus in the short term on conservation by means of a new continuous improvement program across the global business. The World Class Supply Chain (WCSC) system is based on 8 fundamental pillars, each with its own set of procedures, standards and tools designed to standardize processes throughout our operations and drive performance. The growing importance of climate-related risks and other sustainability related risks provided the justification to create an individual pillar for Sustainability which we named 'Our Beer Print' Pillar (OBP Pillar). As a result, we are expending significant resources on improving how we manage energy, carbon and climate risk in all of our operations. The OBP Pillar was designed to align the Company with the principles of the ISO50001 Energy Management Standard. By means of the OBP Pillar we are better at energy savings planning, energy auditing, best-practice sharing, benchmarking, energy efficient technology adoption, performance tracking on energy KPI, maintenance of assets and many more processes that impact on energy use.

Another important aspect of our short-term strategy is to drive a change in accountability for energy use and GHG emissions within our production sites and at the level of departments and production lines that consume energy. In 2015 we successfully rolled out a global implementation of an energy and GHG management information system (EMIS). Named 'The DollarSense Project', it empowers our brewery employees with the right information to drive greater accountability and ownership for energy use and enhanced capability to solve problems and identify savings opportunities.

- iv) How has the long term strategy been influenced by climate change?
- 1. The designation of biogas recovery and use from anaerobic digestion of waste water as a strategic technology. We have completed 9 investments in waste-to-energy projects in the UK, Central Europe and in India. This is driven by energy, carbon and water-related pricing and risk related to waste water.
- 2. We take a risk-based approach to resource allocation in managing water and target water use in those breweries in which we face a risk to the security of supply

but will focus on waste water management in those in which the relevant risk relates to waste water. Breweries with a high risk to their water supply, (measured objectively using the Molson Coors Water Risk Tool based on water catchment studies), will be required to get to a world class water efficiency of 3.0 to 3.5 hl/hl, depending on the complexity of the brewery. All other breweries will continue to have water intensity targets that drive continuous improvement.

- 3. The Global Sustainability Strategy has also mandated a change in focus from energy efficiency to GHG intensity in setting internal KPIs at all levels, driving performance and reporting externally. The DollarSense tool which allows for more direct tracking of GHGs in operations will drive this transition and motivate greater engagement from employees in meeting KPIs by sourcing less GHG intensive energy.
- v) Molson Coors is gaining a strategic advantage through activities in sustainable procurement and the resulting partnerships with our suppliers in sourcing the best quality agricultural raw materials. It is also helping to build resilience to supply shocks, and to find efficiencies in the supply chain. We promote the use of sustainable agriculture practices, supporting our suppliers in the adoption of the six principles of our Agricultural Brewing Ingredients
 Policy:(http://www.molsoncoors.com/en/policies):
- 1. Comply with Molson Coors quality specifications,
- 2. Adopt agricultural policies that strive to maintain soil fertility, water resources, air quality and biodiversity, and manage natural resources in an efficient manner,
- 3. Recognise the importance of accreditation and adopt it in farm assurance programs where appropriate,
- 4. Manage natural resources efficiently,
- 5. Meet food safety guidelines and traceability specifications, and
- 6. Understand and address any future guidelines, best practice and legislative change.

Large capital investments underway in Burton brewery, the largest in the UK, will also deliver important savings in energy, GHG emissions and water use through deployment of the latest technology in brewing, energy conversion and packaging. The New Energy Centre was commissioned in Q1 of 2014 and is delivering important GHG savings through optimised high-efficiency boilers, air compressors and a refrigeration plant. Further investments in beer processing in 2015 will deliver efficiencies that will position the UK business in a competitive advantage related to production costs, including energy and GHG compliance costs.

vi) The most substantial business decision made in the last three years was the approval of 2 capital investments in biogas recovery from anaerobic digestion of waste water. These decisions were made as a result of the designation of this technology as strategic within the Global Sustainability Strategy. This designation, in turn, was the result of a strategic decision to mitigate GHG emissions by 15% to reduce the risk of increasing carbon costs and meet expectations of consumers on reducing our carbon footprint..

CC2.2b

Please explain why climate change is not integrated into your business strategy

CC2.2c

Does your company use an internal price on carbon?

No, but we anticipate doing so in the next 2 years

CC2.2d

Please provide details and examples of how your company uses an internal price on carbon

CC2.3

Do you engage in activities that could either directly or indirectly influence public policy on climate change through any of the following? (tick all that apply)

Direct engagement with policy makers Trade associations Other

CC2.3a

On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
Adaptation resiliency	Support with minor exceptions	EU - Molson Coors has participated, and continues to do so, in the consultation process for the EU Water Framework Directive and its transposition to UK regulation. The Directive and corresponding national regulation relates to future water abstraction licensing in the UK to adapt to climate change and changing demographics.	Molson Coors supports the Directive and its transposition into UK law; we believe that the UK needs to plan for Climate Change and changing demographics in securing water supplies for the future. Our position has been to ensure that this process takes into account local watershed considerations and is inclusive of all

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
			stakeholders.
Energy efficiency	Support	Truck Weights "Safe and Efficient Transportation Act" (SETA), HR 612. This policy change will enable Molson Coors and our family of beer distributors to move the same amount of freight more efficiently using fewer trucks, thereby reducing fuel consumption, (4.6M gallons) and CO2 (9,373 tons) emissions. Engagement has been in the form of direct interface with Congress and the Obama Administration and working through the Coalition for Transportation productivity.	Molson Coors supports the legislation.
Cap and trade	Support	We engaged directly with the Ontario Ministry of Environment and Climate Change on the design of the new cap-and-trade program. We developed a product-based benchmark for gratis allocation that was adopted in the cap-and-trade regulations.	We proposed the following: ability for installations over 10 ktCO2e to opt-in to the system; a product-based benchmark for gratis allocation; and incentives for waste-to-energy in the food & beverage sector. We supported the system coming into effect in 2017 as opposed to being delayed to 2018.
Energy efficiency	Support	ESOS (Energy Savings Opportunity Scheme) in the UK to implement Article 8 (4 to 6) of the EU Energy Efficiency Directive (2012/27/EU). Directive applies to all countries within the EU.	The implementation of Article 8 of the EU Energy Efficiency Directive.

CC2.3b

Are you on the Board of any trade associations or provide funding beyond membership?

No

CC2.3c

Please enter the details of those trade associations that are likely to take a position on climate change legislation

consistent with theirs? association's position influence the position?	Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to influence the position?
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Do you publicly disclose a list of all the research organizations that you fund?

CC2.3e

Please provide details of the other engagement activities that you undertake

Our breweries engage with local authorities on a host of issues, including availability of water resources. This is the case in breweries such as Tadcaster where we have collaborated with authorities and many other stakeholders in protecting the watershed in the face of climate risks, amongst others.

We also engage on energy and GHG issues such as the UK Climate Change Agreements and GHG inventory reporting requirements through participation in sector associations. This is explained further in section 2.3h.

CC2.3f

What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

Molson Coors actively seeks to engage both local, national and international policy makers in an effort to encourage practical policies and legislation in the area of both mitigation and adaptation, as well as drive the establishment of voluntary schemes and community programs that function where legislation is missing or inappropriate. Since 2015 we committed to supporting national governments in adopting an ambitious international framework of national GHG reduction targets and resources to fund adaptation. This was done in collaboration with the leaders in the beverage sector in the form of a Beverage Industry Environmental Roundtable (BIER) joint commitment and was designed to lend our collective support to the 'Road to Paris' process (see position attached). This is consistent with our strategy of acting in collaboration with others as a means of achieving a wider impact and of encouraging action on Climate Change that addresses both GHG emissions mitigation as well as adaptation.

In the UK, the Company is a member of the British Beer and Pub Association trade body and has participated in number of its committees and policy forming bodies including the Environmental Panel which advises on energy and carbon policy. As a trade body, the BBPA meets with the policy makers to discuss future legislation and the potential impact of it on the brewing industry, including climate change legislation and emission trading schemes. The BBPA also responds to consultation documents on future legislation incorporating the views of all its members. Recent consultations to which Molson Coors have contributed include the response to the UK Government proposals for the next phase of the UK Climate Change Agreements and European Emission Trading Scheme.

At the national level in Canada, MCBC participates in the Canadian National Brewers Association which monitors domestic Climate Change policy and would participate in consultations related to regulatory developments such as the proposed cap-and-trade program in Ontario.

In the US, our joint venture Miller Coors has been working with the EPA through voluntary programs such as the Climate Leaders' Voluntary Greenhouse Gas Reduction Program and EPA Smartways Program. These programs encourage adoption of fuel-saving equipment and practices in transportation. In addition, we are members of The Sustainability Consortium, a university based and led group of manufacturers, retailers, researchers, and suppliers who are developing a science-

based sustainability measurement and reporting system to assist with identifying product "hot spots" and the associated best-practices to reduce product impacts.

Miller Coors has a government affairs representative in Washington, DC who is monitoring developments and working with food and manufacturing industry counterparts to offer constructive input to policy development.

In addition, as part of our adaptation strategy our local site management teams participate in roundtable discussions with local authorities to address issues such as watershed management and we have established the Molson Coors Growers group that allows us to influence farming practices. We are also a member of Linking Farming and Environment (LEAF) which advocate Integrated Farm Management to growers and Policy makers.

CC2.3g

Please explain why you do not engage with policy makers

Further Information

Attachments

https://www.cdp.net/sites/2017/48/12348/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC2.Strategy/ERM Heat Map.xlsx https://www.cdp.net/sites/2017/48/12348/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC2.Strategy/Risk and Opportunities Procedure OBP Pillar WCSC.docx

Page: CC3. Targets and Initiatives

CC3.1

Did you have an emissions reduction or renewable energy consumption or production target that was active (ongoing or reached completion) in the reporting year?

Intensity target

Please provide details of your absolute target

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions covered by target (metric tonnes CO2e)	Target year	Is this a science- based target?	Comment
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CC3.1b

Please provide details of your intensity target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions covered by target	Target year	Is this a science- based target?	Comment
Int1	Scope 1+2 (location- based)	100%	15%	Metric tonnes CO2e per unit of production	2011	0.00913	2020	No, but we anticipate setting one in the next 2 years	With respect to targets, we are part way through our current compliance period of 2011-2020 and are currently working on new targets for post-2020. We are evaluating science-based targets as well as another method that aligns with Intended Nationally Determined Contributions of the countries in which we operate. In either case, our targets will be developed on the basis of doing our fair share of mitigation to align with the effort needed in each country within the context of the Paris Agreement. The scope of the GHG target increased from 92 to 100% with the divestment of the Maltings facility. The baseline and subsequent years were also revised to account for other acquisitions and divestments.

Please also indicate what change in absolute emissions this intensity target reflects

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Direction of change anticipated in absolute Scope 3 emissions at target completion?	% change anticipated in absolute Scope 3 emissions	Comment
Int1	Decrease	21	No change		This has been calculated from the absolute Scope 1 and 2 emissions in the baseline year compared to the target intensity in the target year multiplied by the expected production volume. As production volumes are not currently expected to be as high as they were in 2011 the absolute reduction is greater than the intensity reduction.

CC3.1d

Please provide details of your renewable energy consumption and/or production target

ID	Energy types covered by target	Base year	Base year energy for energy type covered (MWh)	% renewable energy in base year	Target year	% renewable energy in target year	Comment
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For all of your targets, please provide details on the progress made in the reporting year

ID	% complete (time)	% complete (emissions or renewable energy)	Comment
Int1	55.6%	74.9%	We are currently ahead of our emissions reduction target this has been delivered through a focus on onsite energy efficiency, a small amount of onsite energy generation, as well as some benefit from grid carbonation.

CC3.1f

Please explain (i) why you do not have a target; and (ii) forecast how your emissions will change over the next five years

CC3.2

Do you classify any of your existing goods and/or services as low carbon products or do they enable a third party to avoid GHG emissions?

Yes

CC3.2a

Please provide details of your products and/or services that you classify as low carbon products or that enable a third party to avoid GHG emissions

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
Product	Spent grains are a by-product of the brewing process that contain biologically sequestered CO2 from barley. It is sold to 3rd parties for use as animal feed which enables avoided GHG emissions in the production of animal feed.	Avoided emissions	Other: We do not classify as a low-carbon product or calculate avoided emissions.	.29%	Less than or equal to 10%	As part of beer production our breweries generate co-products (spent gain and yeast), that are valuable in the food chain. These generate revenue for our business and are also a key area of innovation for us. Longer term, we see that the value of our co-products can be hugely increased though transformational processes. This is providing exciting opportunities for our Innovation teams though our 'Waste to Worth'
Product	Light weighting results in a carbon saving in our supply chain (both packaging material production as well as logistics). We are currently conducting a carbon footprint project to better understand our impacts and were we are avoiding GHG emissions.	Avoided emissions	Other: We do not classify as a low-carbon product or calculate avoided emissions.		Less than or equal to 10%	Molson Coors is currently rolling out weight reduction plans for Can and End light weighting in the US and UK. The large can format – 710 mL / 24oz was changed in November 2016, with further roll out in 2017. The can body was reduced by 2%, with further reductions planned in the coming years. The 206 Can End change is a 10% weight reduction on large cans. Molson Coors UK is going through a conversion from Steel can to Aluminium can which is a 3 year project as capacity is available. They are also looking at can end weight reductions on the 202 end to match North America – 2-7% weight reduction generally done in 1-2 year steps.MillerCoors in the US is continuing with their PET bottle replacement. PET is typically 1/10 the weight of it glass counterpart. In Canada the volume of 710 ml cans was approximately 200,000 hLs. This equates to a reduction of 65 tonnes of aluminium. Based on

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
						the general recycled content the metal industry used of 35% recycled content in North America. Canada will save 1,388 kgCO2eq per year going forward. As of April 2018 we should be 100% aluminum.

CC3.3

Did you have emissions reduction initiatives that were active within the reporting year (this can include those in the planning and/or implementation phases)

Yes

CC3.3a

Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	70	2101
To be implemented*	18	6639
Implementation commenced*	23	3114

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Implemented*	39	2680
Not to be implemented	2	378

CC3.3b

For those initiatives implemented in the reporting year, please provide details in the table below

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Processes	Reduce pasturisation units (PUs) from 22 - 17 (Tascaster)	284.13	Scope 1	Voluntary	3465	0	<1 year	Ongoing	
Energy efficiency: Processes	New Pasteurizer (St. John)	264.60	Scope 1	Voluntary	115080	3082500	>25 years	>30 years	Pasteurizer replaced as aging infrastructure, not for utilities payback
Energy efficiency: Processes	Heat recovery from; WWTP heating pump (Ploisti), Hot water recovery (Smichov) and Degaser - Heat energy recuparation (Apatin)	258.58	Scope 1		36945	116090	1-3 years	11-15 years	

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Processes	Compressed air upgrades and improvements (Haskovo, Smichov and Toronto)	415.34	Scope 2 (location- based)	Voluntary	162517	746377	4-10 years	6-10 years	Compressed air upgrades and/or efficiency; Air recovery system on PET blower (Haskovo), Air pressure distribution upgrade (Smichov), 200 HP Baseload Air Compressor replacement and reducing air leaks (Toronto)
Energy efficiency: Building services	Lighting upgrades (Toronto, Haskovo, Zagreb, Bocs)	143.13	Scope 2 (location- based)	Voluntary	135635	440190	1-3 years	21-30 years	
Energy efficiency: Processes	Energy saving can drier efficiency improvements (Bocs)	144.34	Scope 2 (location- based)	Voluntary	22873	47	1-3 years	11-15 years	
Energy efficiency: Processes	Upgrade cooling suction system (Smichov)	170.12	Scope 1 Scope 2 (location- based)	Voluntary	25850	77785	1-3 years	11-15 years	
Energy efficiency: Processes	20 Tonne gas boiler replacement	64.2	Scope 2 (location- based)	Voluntary	10340	125612	11-15 years	16-20 years	
Fugitive emissions reductions	Hotwell tank and distribution line insulation (Bocs)	59.95	Scope 2 (location- based)	Voluntary	9500	28200	4-10 years	21-30 years	

CC3.3c

What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Internal incentives/recognition programs	Annual bonus payments for all employees are linked to achievement of business goals, including our energy and GHG reduction targets. Additional financial incentives for those with the greatest decision-making authority over energy consumption are included in the internal recognition program.
Employee engagement	We actively engage employees in energy and carbon reduction initiatives and we successfully consolidated "Our Beerprint" as a way of engaging employees further in understanding their contribution to Molson Coors' environmental footprint (see video explanation of Our Beer Print: http://www.molsoncoors.com/en/Responsibility.aspx). There are regular communications discussing energy and carbon issues and reduction activities and employees are encouraged to suggest ways of improving.
Compliance with regulatory requirements/standards	Our UK breweries are subject to IPPC permits, four sites within our European Business Unit are subject to the EU ETS and all of our UK sites are signatories to Climate Change Levy Agreements.
Other	Energy Managers and other relevant internal stakeholders share energy, water and GHG management best practices during monthly meetings of the utilities leaders in our production sites. This helps to disseminate best practice throughout the organization and leads to better adoption of low emitting technology or operational procedures.
Marginal abatement cost curve	As part of our continuous improvement program 'World Class Supply Chain', all breweries are required to plan their 'glide-paths' to achieve their 2020 energy, GHG, water and waste diversion targets. This glide-path process is a series of costed savings opportunities that will deliver the long-term targets and serves to help production sites plan for and justify capital expenditure in these projects. See the attached procedure on glide-paths.

CC3.3d

If you do not have any emissions reduction initiatives, please explain why not

Further Information

Page: CC4. Communication

CC4.1

Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s)

Publication	Publication Page/Section reference Status		Attach the document	Comment
In other regulatory filings	Complete	10K Filing / Pg 24 / Risks Specific to Our Company	https://www.cdp.net/sites/2017/48/12348/Climate Change 2017/Shared Documents/Attachments/CC4.1/Molson Coors 2017 Form 10-k.pdf	The attached Form 10-K outlines climate change risks for investor audiences.
In voluntary communications	Complete	DJSI / Operational Eco-efficiency & Climate Strategy	https://www.cdp.net/sites/2017/48/12348/Climate Change 2017/Shared Documents/Attachments/CC4.1/2017 - Molson Coors Brewing Co - Operational Efficiency.pdf	The attached is the Operational Eco-Efficiency & Climate Strategy Sections for our most recent 2016 DJSI submission that was submitted in June 2017.
In voluntary communications	Underway - previous year attached	Sustainability Report	https://www.cdp.net/sites/2017/48/12348/Climate Change 2017/Shared Documents/Attachments/CC4.1/Our Beer Print Report 2016 - FINAL.pdf	The CR report is published in July of every year. As a result, the 2017 report that reviews 2016 performance is not yet available. The CR report for 2016 has been attached.

Further Information

Module: Risks and Opportunities

Page: CC5. Climate Change Risks

CC5.1

Have you identified any inherent climate change risks that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

Risks driven by changes in regulation Risks driven by changes in physical climate parameters Risks driven by changes in other climate-related developments

CC5.1a

Please describe your inherent risks that are driven by changes in regulation

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
International agreements	The Paris Agreements set the framework for progressively larger economy- wide GHG reductions in virtually all of the countries in which we operate. We expect our operations to be challenged to achieve GHG reductions in-line with the national commitments in all jurisdictions. The result will be significantly higher carbon prices in the future that	Increased operational cost	3 to 6 years	Indirect (Supply chain)	About as likely as not	Low	\$0.5 million of risk related to distortionary carbon costs based on a 20% increase in energy costs in half of the countries in which we operate and a 10% deterioration of our energy cost competitiveness. With an international framework in place, this risk has arguably diminished. Despite this, we have chosen not to change the valuation of this	Since 2008, Molson Coors has reduced its carbon intensity significantly to 0.0086 tCO2e/hectolitre, one of the lowest amongst our global competitors. We have set clear targets to further reduce our GHG intensity and have resourced plans and energy/GHG management systems that will deliver further savings that allow us to remain competitive in our carbon intensity.	\$0.2 M based on the cost of dedicated energy managers at sites. This cost is net of subsidies which exist in most cases.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	apply directly or indirectly to the entire supply chain of our products. The risk related to the international framework for GHG mitigation on our business is the extent to which carbon prices differ significantly across countries and create competitive distortions due to differentiated mitigation burdens between countries.						risk in 2015 and will re-evaluate upon ratification of the Agreement.	This includes investment in low carbon technology such as biogas recovery from our waste water and better process control through use of energy management information systems in all of our breweries.	
Cap and trade schemes	Molson Coors has operations in 4 European countries and 3 Canadian Provinces that are subject, or will soon be subject to cap & trade regulations. Current carbon prices are low to moderate and there is virtual certainty of higher future prices,	Increased operational cost	>6 years	Direct	Likely	Medium	\$31 million of cumulative risk exposure over the next 10 years. This has been calculated by applying a carbon price of \$50/tCO2e to the direct emissions in a 10 year period for those operations within cap & trade jurisdictions. The calculation assumes partial	Molson Coors has reduced its carbon intensity significantly since 2008 and is better positioned than our most important competitors. We have set clear targets to further reduce our GHG intensity and have resourced plans and energy/GHG management systems that will	\$15 M in capital costs associated with reducing direct CO2 emissions to mitigate carbon price risk. These costs deliver energy, carbon and other cost savings and are undertaken at favourable investment returns.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	partly as a result of regulated increases in price floors. Our operations are not GHG intensive and, as such, the more substantive risk to Molson Coors is not increased costs of emitting GHGs itself but the loss in competitiveness if we a operate at a higher GHG intensity than our competition. Our scope 1 and 2 GHG intensity of 0.0086 tCO2e/hl is better than our most important competitors (AB Inbev 9.27 kgCO2e/hl, SAB Miller 10.3 kgCO2e/hl). For this reason, the risk of lost competitiveness is low but this competitive advantage could deteriorate if we do not keep pace						free allocations until 2020 and zero free allocations in subsequent years. In 2015 we revised this risk category significantly by extending our regulatory risk exposure to a rolling 10 year period in order to provide consistency in reported numbers and look-out over several planning horizons. As a result, regulatory risks have increased significantly as the period is extended 4 years and the carbon pricing scenarios are increased	deliver the savings. This includes investment in low carbon technology such as biogas recovery from our waste water in 2 of our plants within the EU ETS. It also includes better process control through use of energy management information systems in all of our breweries.	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	with decarbonisation efforts of our competitors.								
Fuel/energy taxes and regulations	In jurisdictions with no cap-and-trade or carbon tax regulation, we are exposed to the risk of embedded carbon prices in energy purchases as a result of carbon pricing on imported fuels. This same embedded price is not always felt in jurisdictions with cap-and-trade as covered entities are exempt from carbon price pass-through from fuel suppliers (Ontario, Quebec, California).	Increased operational cost	>6 years	Indirect (Supply chain)	Likely	Low	\$1.5 million risk exposure. This was calculated by applying a \$50 price of carbon to all direct emissions of operations in non cap-and-trade/carbon tax jurisdictions.	Molson Coors has reduced its energy per \$ of revenue by 18% since 2011 and has a lower carbon intensity per unit of production than our major competitors. This significantly reduces the probability that a high carbon price impacts our competitiveness. We also have a Global Sustainability Strategy and energy and GHG management system that ensures we have the right strategic focus and operational framework to continue to reduce our exposure to carbon risk. The Dollar\$ense	\$1 M in capital costs associated with reducing energy use to mitigate embedded carbon price risk in energy purchases. These costs deliver energy, carbon and other cost savings and are undertaken at favourable investment returns.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								Project, a software and business process tool for energy and carbon analysis and tracking, has been rolled out to all Molson Coors sites and is providing our production floors with timely, accurate utilities consumption data in the right production context. We are using this enhanced visibility to drive greater accountability and ownership of energy use by the departments and production lines that consume the energy.	
Carbon taxes	Our 3 UK-based breweries are subject to the Climate Change Levy (CCL) applied to their electricity consumption. The CCL rates will rise in the future with	Increased operational cost	3 to 6 years	Direct	Very likely	Low	1.0 M\$/yr is the potential financial implication related to: a) the failure to achieve carbon reduction targets associated with the Climate Change Agreements (CCA) in the UK would	Our UK operations have significantly reduced energy consumption as a result of major investments in our Burton brewery to upgrade processes with state-of-the-art equipment. In	No incremental costs to those incurred to reduce carbon price risk for cap-and-trade and fuel/energy taxes and regulation.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	the notice that the Carbon Reduction Commitment scheme will unwind and revenues recouped through the CCL starting in 2019. Our Vancouver brewery is subject to the British Columbia carbon tax of \$30/tCO2 applied on the purchase of natural gas. There are no indications of carbon tax increases on the horizon but the risk remains.						result in loss of the discount to the CCL. b) Increase in BC carbon tax from \$30 to \$100/tCO2.	addition to the energy and GHG management systems that provide a framework for continuous improvement in energy management, we are investing in energy management information systems (EMIS) in all sites. The DollarSense Project energy and carbon analysis and tracking tool is providing our production floors with timely, accurate utilities consumption data in the right production context. We are using this enhanced visibility to drive greater accountability and ownership of energy use by the departments and production lines that consume the	

Risk driver Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							energy.	
Molson Coors monitors Scope 3 emissions and reports detailed information on these sources to the CDP, DJSI an in our Corporate Responsibility Report. The European Union is working on Product Environmental Footprints (PEF) for a wide range o products, including beverages. To the extent that PEF in Europe or other carbon footprint reporting requirements are put in place, the cost of monitoring GHG emissions along our supply chain would increase.	Increased operational cost	3 to 6 years	Indirect (Supply chain)	More likely than not	Low	Potential financial implications of new product labelling requirements related to life-cycle emissions of our products are difficult to estimate but are likely less than 1 M\$.	Molson Coors is collaborating with the European Union on the development of a Product Environmental Footprint through our work with the Beverage Industry Environmental Roundtable. Through this work we hope to arrive at a PEF solution that is meaningful and cost effective to administer.	The cost of the BIER work on PEF is \$0.02 M

Please describe your inherent risks that are driven by changes in physical climate parameters

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in precipitation extremes and droughts	Precipitation extremes in barley growing regions in the UK, Central Europe and Canada represents a risk of poor harvests and a resulting increase in prices and decrease in availability of raw materials.	Increased operational cost	3 to 6 years	Indirect (Supply chain)	More likely than not	Medium- high	Between \$1.5 M and \$13 M in risk exposure. Financial implications include an increase in the price paid for barley. Small changes in the barley harvest could easily result in increased costs of over \$1.5 M in any particular year. Although unlikely, more severe impacts that simultaneously affect barley production in Europe, the UK and Canada could have a financial impact in the \$13 M range. The estimations are based on price increases in a particular region, in the first case,	We have established the Molson Coors Growers group to make communication of issues such as water conservation easier and to allow for sharing of good practice. Additionally, we have an experienced procurement team that is focused on buying barley at the best price and have a sustainable procurement platform that raises awareness of climate change adaptation issues amongst procurement colleagues and suppliers. In 2015 we embarked on a	The cost of developing the sustainable procurement program was approximately \$0.1 M

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							and in all regions in which we operate in the second case.	long-term scenario planning exercise to evaluate the risk of climate change to our agricultural supply chain. This was done in conjunction with other global beverage companies in order to gain a broader perspective. The results will inform out actions on sustainable agriculture and procurement in the coming years.	
Change in precipitation extremes and droughts	Flooding of the River Trent has been identified as a threat to the Burton Brewery which lies in the lowest part of the town. Additional threats exist in	Reduction/disruption in production capacity	>6 years	Direct	Very likely	Medium	The risk of financial losses is estimated at \$5M in the next 10 years. This estimate uses the actual deductibles paid on insured losses in 2013 and 2014 and	Burton local authorities have upgraded the town flood defence system (spending 55 k\$ to move a 1 in 100 year flood risk to a 1 in 200 year risk) and the brewery has	Recent projects to mitigate flooding from rivers and storms, as well as higher insurance costs are estimated in the range of

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	Central European sites such as our Smichov brewery in Prague. Flooding from rivers could lead to production outages and major impacts on the supply chain. In Canada, Czech Republic and Balkan countries, increased severity of storms has caused severe flooding in certain cities and resulted flood damage to our breweries and infrastructure for distribution of our products.						assumes that similar events with equal costs will occur in the next 10 years (IPCC projection of 1 in 20 year events becoming 1 in 5 to 1 in 15 year events). Losses in 2015 were much less than the previous 2 years but we have taken a conservative approach by not accounted for this.	a flood response plan in place aimed at minimising disruption and damage in the event of a flood event. The UK IT centre was also relocated from Burton to Leeds to avoid any residual risk of flooding. In 2015, no new flooding infrastructure was needed and no major flooding events were recorded.	\$0.4 M.
Change in precipitation pattern	Changing rainfall patterns may affect aquifer winter recharge rates	Reduction/disruption in production capacity	3 to 6 years	Direct	About as likely as not	Low	Financial implications initially are increased water charges which	All UK breweries maintain a secondary supply of municipal water.	Capital expenditure and resources are attributed to attainment

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	which are the main source of water supply for the UK and Central European breweries. Lower aquifer levels could lead to reduced ground water availability leading to increased costs for alternatives. In Canada, droughts could cause a risk to over taxing local water infrastructure. We have undertaken watershed risk assessments for all of our breweries and determined that only one is located in a water-stressed area. This brewery in Tadcaster, UK is operating at world-class water efficiency						could be in the region of \$0.85 M and \$2.1 M. The estimates are based on a respective 10% and 25% increase in the cost of water in either Europe or N. America over a 6 year period.	In addition each brewery has a business continuity plan that could see production moved to other sites in the event of extreme water shortage. In order to minimise exposure to water risks all breweries have water reduction targets and teams in place focused on reducing water consumption and increasing recycling of water whilst many breweries have also conducted watershed assessments. The Tadcaster Brewery, the only one in the Molson Coors network to be determined to be in a water-stressed area,	of corporate water reduction goals and improved process efficiency. Costs of watershed studies were of the region of \$0.02k for all regions

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	and is heavily engaged with the community on watershed management. Nevertheless, climate change could change water availability in the long run.							operates at world-class water efficiencies (3.0 hl/hl) and maintains a strong engagement with the community on watershed management issues.	
Change in mean (average) temperature	UK, US, Central Europe - Increased temperatures could increase agricultural use of water which could further reduce water availability for manufacturing sectors and increase costs of agricultural raw materials.	Increased operational cost	>6 years	Indirect (Supply chain)	About as likely as not	Low	The financial implications are estimated to be 0.85 M\$. This calculation is also based on a % increase in the overall barley procurement costs as a result of water-related problems in barley supply. The incremental financial impact if both a decrease in rainfall and higher temperatures caused much greater stress	Molson Coors has committed to improving water intensity to world-class levels for breweries located in water stressed areas and subject to a significant risk. This will mitigate any future increases in abstraction or purchase costs as well as position the site to defend itself better against restrictions to supply.	The cost of moving our water stressed sites to world class efficiency is currently minimal as the only site in this situation is already within the top 10% of global performers.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							on water resources.		

CC5.1c

Please describe your inherent risks that are driven by changes in other climate-related developments

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	In all business units, Molson Coors is highly susceptible to changing consumer behaviour. Climate changes can impact consumer behaviour by reducing or increasing consumer demand for our product. Warmer weather may increase demand, while significant precipitation in summer months could significantly reduce demand. Changes in consumer buying patterns arising from	Reduced demand for goods/services	1 to 3 years	Direct	About as likely as not	High	Molson Coors distributes a wide range of products for both on-trade (commercial) and off-trade (individual consumer) use. Financial impacts due to change in consumer behaviour are difficult to quantify as they would be reflected in sales volumes. However, in the UK where carbon labelling is most advanced, a 1%	We monitor consumer trends continuously and develop new and innovative products to keep pace with consumer expectations. During the last 2 years we have developed and refined lifecycle assessments for some of our key UK and Canadian brands as a proactive measure that will allow communication of carbon data should consumer trends	The purchase of Quantis LCA software and internal resource focused on LCA amounts to less than 0.1 M\$ whilst monitoring of consumer trends for climate related issues costs zero as this is already funded for marketing purposes.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	labelling and communications are also an area that MCBC is watching closely						drop in sales would equate to \$13 million in lost revenue.	require it. Molson Coors has also reduced the likelihood and magnitude of an impact of storms and colder weather by diversifying its global presence.	

CC5.1d

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC5.1e

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

Further Information

Page: CC6. Climate Change Opportunities

CC6.1

Have you identified any inherent climate change opportunities that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

Opportunities driven by changes in regulation Opportunities driven by changes in physical climate parameters Opportunities driven by changes in other climate-related developments

CC6.1a

Please describe your inherent opportunities that are driven by changes in regulation

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Cap and trade schemes	Phase III of the EU ETS has used a benchmark for the purpose of determining allocation,	Reduced operational costs	1 to 3 years	Direct	Likely	Low	Estimated financial impact of 0.22 M\$ per year. Assumes 25% fewer	Continued focus on energy efficiency and GHG reduction through targets with financial	Zero cost measures as efficiency is partly realizing process efficiencies

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	thereby bestowing a competitive advantage on those facilities within a sector that are most efficient. Recent global benchmarking studies suggest that our UK breweries are more efficient than average and Tadcaster is in the top 10% in efficiency. In both 2014 and 2015, Burton brewery invested heavily in a new state- of-the-art powerhouse and packaging lines that have delivered significant efficiencies. All else being equal, this should decrease our cost structure relative to						direct GHG emissions per unit produced and a tCO2 valued at the Climate Change Levy price of £12.	incentives, engagement on energy efficiency, use of monitoring and targeting tools to drive performance.	and partly investing in GHG savings that deliver a return.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	competitors in the UK market.								
Voluntary agreements	Opportunities to provide greater value added to our customers through GHG reporting and cooperation on mitigation could lead to stronger relationships with our key customers, possibly resulting in preferred supplier status. Best practice sharing with both suppliers and key customers offers opportunities to streamline inefficiencies and reduce supply chain costs. As part of our Joint Commitment on Climate Change with other leaders of the global	Increased demand for existing products/services	1 to 3 years	Direct	More likely than not	Low	Estimated financial impact is between \$1.25 M and \$2.5 M based on a 5% and 10% increase in sales to a large customer with an important sustainability agenda.	First and foremost we are transparent with our activity and cooperate with suppliers in providing data as well as qualitative information. We also engage with customers to cooperate in initiatives that can enhance their own sustainability agendas. In 2015, our cooperation with Tesco on reducing the carbon footprint of its operations, helped us achieve 'Supplier of the Year' award.	The cost is embedded in internal resources within our customer support team and Sustainability teams.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	beverage sector, Molson Coors has committed to enhancing our work in partnerships for the benefit of climate change mitigation and adaptation. We expect this work to provide a business benefit in developing stronger relationships with suppliers and customers.								
Fuel/energy taxes and regulations	In many jurisdictions (British Columbia, U.S, Ontario, UK), national climate change mitigation efforts are leading to sustained and increased public resources available for incentivizing	Reduced capital costs	Up to 1 year	Direct	Very likely	Low	0.5 M\$ per year within the specified time frame but potentially increasing in response to more substantial climate change mitigation efforts in the scenario of an international	Molson Coors maintains close relationships with energy providers and other organizations that offer incentives for energy or water efficiency. We do this to be aware of opportunities and make the most of	Less than \$0.01 M in internal resources dedicated to maintaining relationships with relevant organizations

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	energy efficiency and GHG abatement projects. In 2014 and 2015, Molson Coors benefited from over 0.8 M\$ in financial incentives in the Vancouver, Montreal, Toronto, and Moncton breweries to render investment in our own energy efficiency more profitable						agreement.	external resources to leverage GHG savings.	

CC6.1b Please describe your inherent opportunities that are driven by changes in physical climate parameters

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in mean	Warmer weather could lead to an	Increased demand for	1 to 3 years	Direct	More likely than not	Medium- high	Estimated at \$35.7 M based	We monitor consumer trends	No additional cost

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
(average) temperature	increase in demand but this could be tempered by the adverse impact increased temperatures could have on raw material supply (reported as a risk in Section CC5.1.	existing products/services					on a 1% increase in demand for our products globally.	continuously and develop new and innovative products to keep pace with consumer expectations.	
Change in precipitation pattern	Changes in precipitation patterns may make new areas suitable for growing barley and hops and early realization of the new areas could enable the company to gain favourable rates against supplies from traditional areas	Reduced operational costs	3 to 6 years	Indirect (Supply chain)	About as likely as not	Low	Estimated at \$1.45 M based on a 1% decrease in the price of barley as a result of more supply.	Our Procurement Department monitors barley prices and quality in many markets and is well positioned to capitalize on new opportunities for sourcing raw materials.	Zero additional cost to procurement function.

CC6.1c

Please describe your inherent opportunities that are driven by changes in other climate-related developments

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Other drivers	Education related to the general sustainability or even the specific carbon footprint of brands could act as a market differentiator as consumers are more aware of climate change related impacts and are influenced by this in their choice of products.	Increased demand for existing products/services	1 to 3 years	Direct	Unlikely	Low	Estimated financial impacts in the range of 1-3 M\$ based on incremental sales in one market for a particular brand.	Molson Coors engages with its consumers and customers on sustainability to demonstrate our commitment to good stewardship of the environment. We are increasingly focusing these engagement resources on brand specific initiatives to try and capture a commercial benefit to our excellent reputation on sustainability.	Internal resources estimated to be below 0.05 M\$
Reputation	Engagement and retention of our employees and consumers. Molson Coors is rated as a top employer in most of the jurisdictions in which it operates, partly due to its strong reputation in Corporate Responsibility.	Reduced operational costs	1 to 3 years	Direct	Very likely	Medium	The financial opportunity related to greater retention rates and ability to attract a more talented workforce has not been estimated.	Molson Coors engages its employees on climate change, water and waste through the 'Our Beer Print' program. Recent analysis has indicated that this program is the principle driver of positive engagement from	The 'Our Beer Print' program requires internal resources but none of which are additional to capitalize on this opportunity.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	Continued performance in sustainability strengthens this reputation and enhances our ability to attract and retain the best talent.							our employees.	

CC6.1d

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC6.1e

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

Further Information

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Page: CC7. Emissions Methodology

CC7.1

Please provide your base year and base year emissions (Scopes 1 and 2)

Scope	Base year	Base year emissions (metric tonnes CO2e)
Scope 1	Sat 01 Jan 2011 - Sat 31 Dec 2011	192760
Scope 2 (location-based)	Sat 01 Jan 2011 - Sat 31 Dec 2011	122829
Scope 2 (market-based)		

CC7.2

Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

Please select the published methodologies that you use

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

Defra Voluntary Reporting Guidelines

US EPA Climate Leaders: Direct Emissions from Stationary Combustion

US EPA Climate Leaders: Indirect Emissions from Purchases/Sales of Electricity and Steam

CC7.2a

If you have selected "Other" in CC7.2 please provide details of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

CC7.3

Please give the source for the global warming potentials you have used

Gas	Reference
CH4	IPCC Fifth Assessment Report (AR5 - 100 year)
N2O	IPCC Fifth Assessment Report (AR5 - 100 year)
CO2	IPCC Fifth Assessment Report (AR5 - 100 year)

Please give the emissions factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data at the bottom of this page

Fuel/Material/Energy	Emission Factor	Unit	Reference

Further Information

Page: CC8. Emissions Data - (1 Jan 2016 - 31 Dec 2016)

CC8.1

Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

Operational control

CC8.2

Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e

152042

CC8.3

Please describe your approach to reporting Scope 2 emissions

Scope 2, location-based	Scope 2, market-based	Comment
We are reporting a Scope 2, location-based figure	We are reporting a Scope 2, market-based figure	

CC8.3a

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e

Scope 2, location-based	Scope 2, market-based (if applicable)	Comment
88896	102382	

CC8.4

Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

CC8.4a

Please provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure

Source	Relevance of Scope 1 emissions from this source	Relevance of location-based Scope 2 emissions from this source	Relevance of market-based Scope 2 emissions from this source (if applicable)	Explain why the source is excluded
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CC8.5

Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	Less than or equal to 2%	Assumptions Metering/ Measurement Constraints	Remaining uncertainty relates to less accuracy in metering and tracking in offices and distribution centers as well as fleet data for employee travel has been consolidated using average emission factors for diesel cars, petrol cars and vans rather than calculated on individual car emissions as this data is not available. These sources are immaterial and do not impact the overall uncertainty to a significant extent.
Scope 2 (location- based)	Less than or equal to 2%	Metering/ Measurement Constraints	Uncertainty relates to data gaps and less accuracy in metering and tracking in offices and distribution centers. In some very small offices and distribution centers, electricity consumption might be paid within the rent of the premises and not broken out, thereby causing data gaps for Scope 2 emissions. These sources are considered immaterial and do not impact the overall uncertainty to a significant extent.
Scope 2 (market- based)	Less than or equal to 2%	Metering/ Measurement Constraints	Uncertainty relates to data gaps and less accuracy in metering and tracking in offices and distribution centers. In some very small offices and distribution centers, electricity consumption might be paid within the rent of the premises and not broken out, thereby causing data gaps for Scope 2 emissions. These sources are considered immaterial and do not impact the overall uncertainty to a significant extent.

CC8.6

Please indicate the verification/assurance status that applies to your reported Scope 1 emissions

Third party verification or assurance process in place

CC8.6a

Please provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
Annual process	Complete	Limited assurance	https://www.cdp.net/sites/2017/48/12348/Climate Change 2017/Shared Documents/Attachments/CC8.6a/CC ISAE3000 statement - MCBC 2017_FINAL.pdf	Pg 2.	ISAE 3410	100

CC8.6b

Please provide further details of the regulatory regime to which you are complying that specifies the use of Continuous Emission Monitoring Systems (CEMS)

Regulation	% of emissions covered by the system	Compliance period	Evidence of submission

CC8.7

Please indicate the verification/assurance status that applies to at least one of your reported Scope 2 emissions figures

Third party verification or assurance process in place

CC8.7a

Please provide further details of the verification/assurance undertaken for your location-based and/or market-based Scope 2 emissions, and attach the relevant statements

Location- based or market- based figure?	Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
Location- based	Annual process	Complete	Limited assurance	https://www.cdp.net/sites/2017/48/12348/Climate Change 2017/Shared Documents/Attachments/CC8.7a/CC ISAE3000 statement - MCBC 2017_FINAL.pdf	Pg. 2	ISAE 3410	100

CC8.8

Please identify if any data points have been verified as part of the third party verification work undertaken, other than the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2

Additional data points verified	Comment
Year on year change in emissions (Scope 1 and 2)	The 3rd party assurance process included verification of changes in Scope 1 and 2 emissions from one year to the next and required explanations of significant changes.
Progress against emissions reduction target	The 3rd party assurance process included verification of reductions from one year to the next and how this will be reported as progress against GHG intensity targets
Year on year emissions intensity figure	The 3rd party assurance process included verification of emissions intensity figures and tracking against emission

	Additional data points verified	Comment
		intensity target.
CC8.9		
	Are carbon dioxide emissions from biolo	ogically sequestered carbon relevant to your organization?
	Yes	
CC8.9a	1	
	Please provide the emissions from biolo	ogically sequestered carbon relevant to your organization in metric tonnes CO2
	230	
Furthe	r Information	
Page:	CC9. Scope 1 Emissions Breakdown	n - (1 Jan 2016 - 31 Dec 2016)
		- (· · · · · · · · · · · · · · · · · ·
CC9.1		
	Do you have Scope 1 emissions sources	s in more than one country?
	Yes	

Please break down your total gross global Scope 1 emissions by country/region

Country/Region	Scope 1 metric tonnes CO2e
Canada	67658
Serbia	9268
Bulgaria	5399
Czech Republic	8601
Romania	10943
Montenegro	3558
Croatia	286
United Kingdom	39197
Hungary	6413
India	486
Ireland	233

CC9.2

Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

By business division By facility

CC9.2a

Please break down your total gross global Scope 1 emissions by business division

Business division	Scope 1 emissions (metric tonnes CO2e)
Molson Coors Canada	67658
Molson Coors Europe	83897
Molson Coors International	486

CC9.2b

Please break down your total gross global Scope 1 emissions by facility

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
Apatin Brewery	8248	45.41796	18.594154
Bocs Brewery	6413	48.34819	21.01844
Burton Brewery	29571	52.80592	-1.63925
Cardiff Office	13	51.331158	3.64819
Franciscan_Well	233	51.901000	8.48200
Haskovo Brewery	5399	41.582536	25.35211
Trebjesa Brewery	3351	42.474693	18.58230
Ostravar Brewery	298	49.5181	18.17439
Ploiesti Brewery	10943	44.57859	25.59582
Sharps Brewery	2895	50.55211	-4.89139
Smichov Brewery	8303	50.45675	14.25416
Tadcaster Brewery	6698	53.88283	-1.27214
Whetmore	20	52.80592	-1.63925
Zagreb Brewery	286	45.5168	16.01244
Canada Head Office	169	43.67507	-79.59019
Granville Island	76	49.2724	123.13510
Toronto Brewery	18442	43.67507	-79.59019

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
Creemore Brewery	956	44.32527	-80.10579
Moncton Brewery	1529	46.12859	-64.73987
Montreal Brewery	21468	45.51747	-73.54857
Vancouver Brewery	5998	49.27192	-123.14510
St. Johns Brewery	2712	47.57101	-52.71709
Company-owned distribution fleet and warehouses	16308	0	0
Patna Brewery	61	25.56332	84.86981
Bhankarpur Brewery	230	30.6060	76.8339
Saha Brewery	195	27.3114	82.9899

CC9.2c

Please break down your total gross global Scope 1 emissions by GHG type

GHG type	Scope 1 emissions (metric tonnes CO2e)

CC9.2d

Please break down your total gross global Scope 1 emissions by activity

Activity	Scope 1 emissions (metric tonnes CO2e)

Further Information

Page: CC10. Scope 2 Emissions Breakdown - (1 Jan 2016 - 31 Dec 2016)

CC10.1

Do you have Scope 2 emissions sources in more than one country?

Yes

CC10.1a

Please break down your total gross global Scope 2 emissions and energy consumption by country/region

Country/Region	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
Canada	3300	3506	104126	0
Serbia	12912	12912	18499	0
Bulgaria	7161	7213	14125	0
Czech Republic	12213	13771	32039	0
Romania	7133	9105	22188	0
Montenegro	2390	2390	5074	0

Country/Region	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
Croatia	8502	12259	42231	0
United Kingdom	28263	33118	68590	0
Hungary	3162	4187	11145	0
India	3740	3740	4574	0
Ireland	120	180	282	0

CC10.2

Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

By business division By facility

CC10.2a

Please break down your total gross global Scope 2 emissions by business division

Business division	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
Molson Coors Canada	3300	3506
Molson Coors Europe	81856	95136
Molson Coors International	3740	3740

CC10.2b

Please break down your total gross global Scope 2 emissions by facility

Facility	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
Canada Head Office	52	56
Creemore Brewery	69	74
Granville Island	7	7
Moncton Brewery	1007	1081
Montreal Brewery	99	106
St.J Brewery	104	112
Toronto Brewery	1461	1568
Vancouver Brewery	163	164
Apatin Brewery	12912	12912
Bocs Brewery	3162	4187
Burton Brewery	22893	26826
Cardiff Brewery	76	89
Franciscan Well Brewery	120	180
Haskovo Brewery	7161	7213
Trebjesa Brewery	2390	2390
Ostravar Brewery	3773	4064
Ploiesti Brewery	7133	9105
Sharps Brewery	961	1126
Smichov Brewery	8440	9707
Tadcaster Brewery	4320	5062
Whetmore Brewery	13	16
Zagreb Brewery	8502	12259
Bhankarpur Brewery	2036	2036
Patna Brewery	411	411
Saha Brewery	1292	1292
Canadian Warehouses	337	337

CC10.2c

Please break down your total gross global Scope 2 emissions by activity

Activity	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)

Further Information

Page: CC11. Energy

CC11.1

What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

CC11.2

Please state how much heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year

Energy type	MWh
Heat	
Steam	40310
Cooling	

CC11.3

Please state how much fuel in MWh your organization has consumed (for energy purposes) during the reporting year

727552

CC11.3a

Please complete the table by breaking down the total "Fuel" figure entered above by fuel type

Fuels	MWh
Natural gas	607952
Diesel/Gas oil	62956
Distillate fuel oil No 1	34037
Liquefied petroleum gas (LPG)	9452
Biogas	5854
Motor gasoline	278
Other: Biomass	7023

CC11.4

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor in the market-based Scope 2 figure reported in CC8.3a

Basis for applying a low carbon emission factor	MWh consumed associated with low carbon electricity, heat, steam or cooling	Emissions factor (in units of metric tonnes CO2e per MWh)	Comment
No purchases or generation of low carbon electricity, heat, steam or cooling accounted with a low carbon emissions factor	0	0	

CC11.5

Please report how much electricity you produce in MWh, and how much electricity you consume in MWh

Total electricity consumed (MWh)	Consumed electricity that is purchased (MWh)	Total electricity produced (MWh)	Total renewable electricity produced (MWh)	Consumed renewable electricity that is produced by company (MWh)	Comment
290795	290795	0	0	0	Molson Coors does not purchase or produce any renewable electricity

Further Information

Page: CC12. Emissions Performance

CC12.1

How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to the previous year?

Decreased

CC12.1a

Please identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined) and for each of them specify how your emissions compare to the previous year

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
Emissions reduction activities	2.49	Decrease	There were 39 dedicated GHG reduction activities which were responsible for a decrease of 2,680 tCO2e. In addition to this Molson Coors' owned logisitics fleet in Canada consumed a total of 1.4mil Litres of Diesel less than in 2015. This is equivalent to a CO2e reduction of 3670t (using a diesel ghg conversion factor of 2.6765 kgCO2e/hl: GHG Protocol Stationary Combustion Tool v4 (2010)) This provides a total reduction of 6,350 tCO2e. Reduction calculation: 6,350 / 254,755 (2015 scope 1 and 2) x 100.
Divestment		No change	
Acquisitions		No change	Molson Coors took full ownership of Miller Coors in late October 2016. The emissions associated with this operation has not been included in this year's disclosure. Our GHG Inventory Procedure states that acquisitions are included upon the first full calendar year of operation. We are currently looking at rebaselining and setting new targets for the whole company from 2016 to 2025
Mergers		No change	No mergers took place
Change in output	0.12	Increase	Production volumes were 0.12% down on the year with respect to 2015. The overwhelming majority of GHG emissions are variable with production. For this reason, the decrease in GHG emissions was assumed to be equal to the decrease in production volumes.
Change in methodology	2.08	Decrease	The natural gas consumed at the Burton and Tadcaster breweries had previously an incorrect conversion factor applied. The combined natural gas usage at the two sites is 594,000,000 MJ. This energy has been calculated based on a gross calorific value, therefore a conversion factor of 0.051 kgCO2e/MJ. In previous years it has been assumed that the energy data had been calculated using a net calorific value using a conversion factor of 0.056 kgCO2e/MJ. Using the correct factor has resulted in a 3,300 tCO2e reduction in emissions. In addition there is a 2000 tonnes CO2e benefit from changes to emissions factors used especially the location based grid intensity factor in some markets
Change in boundary		No change	
Change in physical operating conditions		No change	
Unidentified	0.85	Decrease	The reduction in GHG that is not accounted for in the above categories is attributed to 'unidentified'. This is

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
			likely due to uncertainties in the calculation methods of the above factors as well as energy and GHG savings initiatives that were not registered.
Other		No change	

CC12.1b

Is your emissions performance calculations in CC12.1 and CC12.1a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

CC12.2

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per unit currency total revenue

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator: Unit total revenue	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.0000719	metric tonnes CO2e	3350500000	Location- based	0.7	Increase	Total absolute Scope 1 and 2 emissions increased 5.42% on the year as a result of adding the two new Indian sites and the inclusion of adding Canadian warehoused in scope one that were previously

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator: Unit total revenue	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
						counted in scope 3. We are confident we can sustain a downward trend in absolute emissions despite year-on-year fluctuations in revenue and business acquisitions will keep us on a downward trend in GHG emissions per unit of revenue over the medium and long-term. Absolute scope 1 and 2 emissions have steadily decreased and reached 18.7% below 2011 baseline levels last year.

CC12.3 Please provide any additional intensity (normalized) metrics that are appropriate to your business operations

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
28.17	metric tonnes CO2e	full time equivalent (FTE) employee	8552	Location- based	0.64	Decrease	There was a slight reduction in FTE from 2015 to 2016 due to the integration with MillerCoors. The reduction corresponds directly with the 2.49% reduction in direct and indirect GHG emissions (scope 1 and 2). Activities to decrease emissions by 2,680 tCO2e were attributed to 39 dedicated GHG reduction projects in 2016.
0.0081	metric tonnes CO2e	unit of production	29731685	Location- based	5.3	Decrease	Molson Coors focus on energy efficiency and GHG mitigation is on reducing the GHG intensity per unit of product. Despite a small production decrease

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
							(headwind), we managed to decrease intensity by 5.3% on the year as a result of process improvements leveraged through our energy and GHG management system and 39 dedicated GHG savings projects (waste to biogas projects, line optimizations, residual heat recovery, etc). The reduction represents the 4th consecutive year of savings per unit of product, as well as in absolute emissions.

Further Information

Page: CC13. Emissions Trading

CC13.1

Do you participate in any emissions trading schemes?

Yes

CC13.1a

Please complete the following table for each of the emission trading schemes in which you participate

Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tonnes CO2e	Details of ownership
European Union ETS	Fri 01 Jan 2016 - Sat 31 Dec 2016	24724	2534	41574	Facilities we own and operate

CC13.1b

What is your strategy for complying with the schemes in which you participate or anticipate participating?

Our strategy is first and foremost to invest in our own energy efficiency and reduce GHG emission by doing so before considering purchases of allowances. There will be temporal issues related to when such investments yield reductions which may need purchases to cover in any given year. However, we will undertake all cost effective reductions as a priority and use markets as a mechanism to manage annual imbalances and as a safeguard when internal reductions reach a high marginal abatement cost.

The compliance position of each brewery in the EU ETS is forecast for the year forward and entire compliance period. Energy consumption and direct emissions are monitored on a weekly basis, allowing the sites to identify any potential shortfalls or excess allowances on a timely basis. Should a site fail to meet its cap, excess carbon from sites within the group that have achieved their cap limits will be transferred to make up any short falls. Any net shortfall of allowances in a particular year would first be covered by use of banked allowances from previous exercises. Any net shortfall of allowances at Group level that could arise in Phase III of the EU ETS would be managed by acquiring allowances in the market in a manner that optimizes price risk.

CC13.2

Has your organization originated any project-based carbon credits or purchased any within the reporting period?

No

Please provide details on the project-based carbon credits originated or purchased by your organization in the reporting period

Credit origination or credit purchase Project type identification	Verified to which standard	Number of credits (metric tonnes CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits canceled	Purpose, e.g. compliance
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Further Information

Page: CC14. Scope 3 Emissions

CC14.1

Please account for your organization's Scope 3 emissions, disclosing and explaining any exclusions

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods and services	Relevant, calculated	694902	1. Data Types and Sources – The scope of the emissions includes MCC, MCE, MCI. It covers, purchased raw and processed agricultural materials, and packaging materials. Primary activity data has been collected on purchase levels of raw materials and packaging	100.00%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			materials. Where material purchase data has not been available educated assumptions have been made based on volume brewed or packaged. Emissions factors have been sourced from various references which have been independently verified. Country specific have been used where possible. Where a process performed by a supplier is equivalent to a Molson Coors Process, such as brewing or Malting LCA data from the Molson Coors Process has been used as a proxy for the supply process if primary data is not available. 2. Data Quality: - Over all data quality is considered good. 3. Methods and assumptions: Emissions have been calculated according to GHG Protocol Scope 3 guidance. Molson Coors LCA studies have been calculated to ISO 14040.		
Capital goods	Not relevant, explanation provided		No robust methodology exists to estimate emissions from broad capital equipment purchase programs across an entire network of breweries globally.		Capital equipment for brewing includes many metallic vessels, pipework, conveyor belts and automated packaging solutions. Unitary GHG data from equipment manufacturers is scarce for the time being but MolsonCoors will work towards calculating this in the future. Whilst it is very difficult to calculate the LCA of capital equipment due to the data provided it is felt that due to the higher utilisation of capital equipment and typically long operational life the embodied emissions are likely to be low compared to the

Evaluation status	metric tonnes CO2e	Emissions calculation methodology	calculated using data obtained from suppliers or value chain partners	Explanation
				emissions associated with the operations. Given that scope 1 and 2 emissions are only about 18% of the total value chain footprint it likely to be fair to assume that the scope 3 emissions relating the capital equipment purchased is likely to be significantly under 1% of the total value chain.
Relevant, calculated	41116	Primary data for fuel use is collected from production and non-production sites as part of the Scope 1 and Scope 2 reporting. This activity data is multiplied by the respective emissions factors for each fuel to derive GHG emissions from fuel and energy related activities excluding combustion, such as; fossil fuel well-to-tank (WTT) and electricity Transmission and distribution emissions (T&D). Also included here are WTT of owned fleets and WTT & TD of owned warehouses.	100.00%	The calculation uses primary data of fuel purchases validated against supplier invoices
Relevant, calculated	12379	1. Data Types and Sources: The scope of the emissions includes MCC, MCE, MCI, it covers the transport of brewing materials (raw and processed agricultural ingredients) and packaging materials. Tkm was calculated on a supplier-by-supplier and site-by-site basis and includes return journeys. 2. Data Quality: - Data quality is good. 3. Methods and assumptions: - Emissions have been calculated according to GHG Protocol Scope 3 guidance.	100.00%	Not calculated this year, but lat year was 0.05%
	Relevant, calculated	Evaluation status Relevant, calculated Relevant, calculated 12379	Evaluation status Primary data for fuel use is collected from production and non-production sites as part of the Scope 1 and Scope 2 reporting. This activity data is multiplied by the respective emissions factors for each fuel to derive GHG emissions from fuel and energy related activities excluding combustion, such as; fossil fuel well-to-tank (WTT) and electricity Transmission and distribution emissions (T&D). Also included here are WTT of owned fleets and WTT & TD of owned warehouses. 1. Data Types and Sources: The scope of the emissions includes MCC, MCE, MCI, it covers the transport of brewing materials (raw and processed agricultural ingredients) and packaging materials. Tkm was calculated on a supplier-by-supplier and site-by-site basis and includes return journeys. 2. Data Quality: - Data quality is good. 3. Methods and assumptions: - Emissions have been calculated according to GHG Protocol Scope 3 guidance.	Evaluation status Primary data for fuel use is collected from production and non-production sites as part of the Scope 1 and Scope 2 reporting. This activity data is multiplied by the respective emissions factors for each fuel to derive GHG emissions from fuel and energy related activities excluding combustion, such as; fossil fuel well-to-tank (WTT) and electricity Transmission and distribution emissions (T&D). Also included here are WTT of owned fleets and WTT & TD of owned warehouses. 1. Data Types and Sources: The scope of the emissions includes MCC, MCE, MCI, it covers the transport of brewing materials (raw and processed agricultural ingredients) and packaging materials. Tkm was calculated on a supplier-by-supplier and site-by-site basis and includes return journeys. 2. Data Quality: - Data quality is good. 3. Methods and assumptions: - Emissions have been calculated according to GHG Protocol Scope 3 guidance.

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
in operations	explanation provided				of overall Scope 3 emissions.
Business travel	Not relevant, explanation provided				Not calculated this year, but lat year was 0.2% of overall Scope 3 emissions.
Employee commuting	Not relevant, explanation provided				Data on employee commuting was not possible to collect from a review of a small sample, it was estimated that this activity would contribute less than 0.5% of Molson Coors Scope 3 emissions.
Upstream leased assets	Not relevant, explanation provided				We do not have any downstream leased assets with material GHG emissions.
Downstream transportation and distribution	Relevant, calculated	97707	1. Data Types and Sources: - The scope includes all material sources related to the direct transport of packaged beer to retail stores. Data on mileage or transport fuel consumed is collected from 3rd party hauliers and appropriate emissions factors applied to calculate GHG emissions. 2. Data Quality: good 3. Methods and assumptions: - Emissions have been calculated according to GHG Protocol Scope 3 guidance and verified	100.00%	Data quality improved in 2016 as we worked with our 3rd party distribution networks to obtain GHG emissions that were previously not available.
Processing of sold products	Relevant, not yet calculated				GHG emissions from processing of our sold products are associated with collection of returnable bottles from retail stores. No data is available for this category at this time.
Use of sold	Relevant,	319429	1. Data Types and Sources: The scope of the	100.00%	_ ,

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
products	calculated		emissions includes MCC, MCE, MCI. It covers the emissions associated with the use of products sold. Including refrigeration and emissions of process gasses. Primary activity data on volumes of beer sold in different product types, including draft beer and small pack beer were collected. Assumptions on electricity used in cooling have been made on electricity use in cooling used in delivery of small pack and draft beer based on Molson Coors LCA work. Country specific or customised factors have been used where possible. 2. Data Quality: - Data Quality is fair. 3. Methods and assumptions: - Emissions have been calculated according to GHG Protocol Scope 3 guidance. Molson Coors LCA studies have been calculated to ISO 14040.		
End of life treatment of sold products	Relevant, calculated	6576	1. Data Types and Sources: The scope of the emissions includes MCC, MCE, MCI. It covers the emissions associated with the disposal of packaging material associated with sold products. Primary activity data on the mass and type of packaging materials, volumes of beer sold in different product types (including draft beer and small pack beer) were collected. Country level recycling and disposal method data were collected and used to base assumptions of end of life treatment. Country specific or customised factors have been used		

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			where possible. 2. Data Quality: Data Quality is good. 3. Methods and assumptions: - Emissions have been calculated according to GHG Protocol Scope 3 guidance. Molson Coors LCA studies have been calculated to ISO 14040.		
Downstream leased assets	Not relevant, explanation provided		We do not have any downstream leased assets with material GHG emissions.		No relevant assets downstream of production are leased.
Franchises	Not relevant, explanation provided		Not relevant		Molson Coors does not franchise any operations.
Investments	Relevant, calculated	2314879	1. Data Types and Sources 42% of Miller Coors. Including direct energy, indirect energy, waste generated in operations, Fuel-and-energy-related activities (not included in Scope 1 or 2), upstream goods and service, upstream transport, Use of sold products and end of life of sold products. Primary activity data was collected on direct energy, indirect energy, waste generated in operations, Fuel-and-energy-related activities (not included in Scope 1 or 2). This data was also assured by a third party. To calculate upstream goods and service, upstream transport, use of sold products and end of life of sold products primary data was collected on sales volume to enable educated assumptions using LCA data. Where a process performed by a supplier is	42.00%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			equivalent to a Molson Coors Process, such as brewing or Malting LCA data from the Molson Coors Process has been used as a proxy for the supply process if primary data is not available. Country specific or customized factors have been used where possible. 2. Data Quality: - Over all data quality is considered good. 3. Methods and assumptions: Emissions have been calculated according to GHG Protocol Scope 3 guidance. Molson Coors LCA studies have been calculated to ISO 14040.		
Other (upstream)	Relevant, calculated	3947	Municipal water supply	100.00%	
Other (downstream)	Relevant, calculated	1980	Waste Water - Municipal Treatment	100.00%	

CC14.2

Please indicate the verification/assurance status that applies to your reported Scope 3 emissions

Third party verification or assurance process in place

Please provide further details of the verification/assurance undertaken, and attach the relevant statements

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 3 emissions verified (%)
Annual process	Complete	Limited assurance	https://www.cdp.net/sites/2017/48/12348/Climate Change 2017/Shared Documents/Attachments/CC14.2a/CC ISAE3000 statement - MCBC 2017_FINAL.pdf	Pg. 2	ISAE3000	12

CC14.3

Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?

Yes

CC14.3a

Please identify the reasons for any change in your Scope 3 emissions and for each of them specify how your emissions compare to the previous year

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Purchased goods &	Change in	39	Decrease	in 2016 we have revisited our scope 3 emissions calculations. We have changed the

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
services	methodology			approach with a focus on more primary data sources as opposed to industry or sector averages. This methodology will form the baseline year for our intended value chain emissions targets for 2025, from this year on we do not expect year to year values to alter significantly (other than for specific interventions).
Fuel- and energy- related activities (not included in Scopes 1 or 2)	Change in boundary	51	Increase	This year T&D and WTT emissions were included for all scope 1 and 2 emisisons sources.
Upstream transportation & distribution	Change in methodology	88	Decrease	in 2016 we have revisited our scope 3 emissions calculations. We have changed the approach with a focus on more primary data sources as opposed to industry or sector averages. This methodology will form the baseline year for our intended value chain emissions targets for 2025, from this year on we do not expect year to year values to alter significantly (other than for specific interventions).
Waste generated in operations	Change in boundary	100	Decrease	This was removed from scope as reliable data was not available, last year it represented 0.07% of scope 3 emissions
Business travel	Change in boundary	100	Decrease	This was removed from scope as reliable data was not available, last year it represented 0.31% of scope 3 emissions
Downstream transportation and distribution	Change in methodology	38	Decrease	in 2016 we have revisited our scope 3 emissions calculations. We have changed the approach with a focus on more primary data sources as opposed to industry or sector averages. This methodology will form the baseline year for our intended value chain emissions targets for 2025, from this year on we do not expect year to year values to alter significantly (other than for specific interventions).
Use of sold products	Change in boundary	158	Increase	The boundary was extended to include the GHG emissions associated with product cooling for both on-trade and off-trade products

CC14.4

Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies? (Tick all that apply)

Yes, our suppliers Yes, our customers

CC14.4a

Please give details of methods of engagement, your strategy for prioritizing engagements and measures of success

From our recent carbon footprint exercise, we determined that one of the largest pieces of carbon emissions comes from our packaging. In fact, the embodied emissions of our packaging accounts for 37% of our entire carbon footprint. Of our emissions from packaging, 82% is from our primary packaging, such as the aluminum cans and glass bottles that contain our beer. The list of suppliers that provide our primary packaging is a short one, since many suppliers like O-I and Ball are global. Less than 10 suppliers make up close to 30% of our value chain footprint. That is why we have strategic relationships with all our packaging partners, where we are able to apply a high level of influence on their products and their business operations to reduce GHG emissions, beyond just compliance. In the U.S., we have joint venture partnerships with our glass bottle and aluminum can suppliers, O-I and Ball, which allows us the ability to share information and resources and work even closer together toward achieving our environmental goals.

With all our suppliers, regardless if they are high volume or strategic partners, our Supplier Standards sets our minimum expectations of suppliers around environmental, social and economic sustainability. Our Standards also cite our global Packaging and Agricultural Brewing Ingredients policies and the expectations therein. We expect suppliers to make every effort to limit the environmental impact of their business operations and to have appropriate programs in place to help achieve this objective. Suppliers are required to demonstrate compliance against the applicable environmental expectations of Energy, Emissions to Air, Natural Resources, Biodiversity, Water, Waste, and Pollution. Our Supplier Standards also set out the minimum compliance standards for social and economic sustainability, including: ethical business practices, commercial standards, employment standards and community responsibilities. Suppliers are required to comply with all social and economic expectations.

Since 2014, our Supplier Standards are communicated as an ongoing requirement to 100% of our global supply base through our Standard Terms and Conditions. Additionally, we incorporated sustainability metrics into our Supplier Quality Scorecard. The scorecard now tracks environmental performance data (CO2, Energy & Water) on a quarterly basis with our Tier 1 suppliers. This allows Molson Coors to track the progress of our suppliers' impact on the environment and reward those who achieve positive results.

Molson Coors is committed to sourcing from suppliers, who grow, produce and deliver agricultural brewing ingredients in a manner that recognizes and embraces our quality, safety and sustainability standards. We support our suppliers and producers in achieving this by working with them to recognize and adopt the six principles of our Agricultural Brewing Ingredients Policy. The policy covers (as a minimum) barley, wheat, corn and hops – our primary brewing ingredients. The implementation and governance of this policy is supported by our wider sustainable procurement program, and is also included in our Supplier Standards.

Our Supplier Risk Dashboard and Heat Map serve as the Company tool to facilitate the early detection of sustainability risks in the supply chain. The Supplier Risk Dashboard identifies sustainability risks for each category against 8 focus areas: energy, emissions to air, natural resources, biodiversity, water, waste, pollution, and labor & ethics, and provides an overall category risk rating. If a category is found to constitute a high overall risk, or contains high risks in relation to the focus areas, category managers will incorporate questions into tender documentation and performance scorecards. The intent is to investigate, mitigate and address these potential risks.

Many of our customers request specific environmental data in tender processes. Aligned to our Global objective to be First Choice for Customer and Consumers, we recently completed stakeholder analysis that focused on understanding how our key customers see the risk and opportunities facing beer companies, their

understanding of Molson Coors current activities on sustainability and where our customers see opportunities to work together on shared sustainability issues. Based on this work we are focusing both our internal and external activities to more closely align with our stakeholders' expectations and find opportunities to work collaboratively on shared challenges or opportunities.

CC14.4b

To give a sense of scale of this engagement, please give the number of suppliers with whom you are engaging and the proportion of your total spend that they represent

Type of engagement	Number of suppliers	% of total spend (direct and indirect)	Impact of engagement
Collaboration/innovation	99	.56%	In 2016, Molson Coors had 99 critical suppliers. A supplier is considered "critical" based on a combination of attributes, including (but not limited to) spend, business criticality, ease of supplier replacement & alternate products. We have a high level of engagement with these high volume critical suppliers, which includes our 8 primary packaging partners, to get great innovation that can drive top line growth. This includes advancing our process and products to drive new technologies, packaging innovations and process efficiencies.

CC14.4c

Please explain why you do not engage with any elements of your value chain on GHG emissions and climate change strategies, and any plans you have to develop an engagement strategy in the future

Further Information

Module: Sign Off

Page: CC15. Sign Off

CC15.1

Please provide the following information for the person that has signed off (approved) your CDP climate change response

Name	Job title	Corresponding job category
Natalie Lau	Global Sustainability Sr. Manager	Environment/Sustainability manager

Further Information

Module: FBT

Page: FBT1. Agriculture

FBT1.1

Are agricultural activities, whether in your direct operations or elsewhere in your value chain, relevant to your climate change disclosure?

Yes

FBT1.1a

Please explain why agricultural activities are not relevant to your climate change disclosure

FBT1.2

Are the agricultural activities that you have identified as relevant undertaken on your own farm(s), elsewhere in your value chain, or both?

Elsewhere in value chain

FBT1.2a

Please explain why agricultural emissions from your own farms are not relevant

None are owned

FBT1.3

Do you account for greenhouse gas emissions from agricultural activities undertaken on your own farm(s) as part of the global gross Scope 1 emissions figure reported in CC8.2, and/or the Scope 2 figure reported in CC8.3a of the core climate change questionnaire?

FBT1.3a

Please select the form(s) in which you wish to report the greenhouse gas emissions produced by agricultural activities (agricultural emissions) undertaken on your own farm(s)

FBT1.3b

Please report your total agricultural emissions produced on your own farm(s) and identify any exclusions in the table below

Scope	Agricultural emissions (metric tonnes CO2e)	Methodology	Exclusions	Explanation	Comment
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FBT1.3c

Please report your agricultural emissions produced on your own farm(s), disaggregated by category, and identify any exclusions in the table below

Emissions category	Agricultural emissions (metric tonnes CO2e)	Methodology	Exclusions	Explanation	Comment
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FBT1.3d

Please explain why you do not account for greenhouse gas emissions from agricultural activities undertaken on your own farm(s), and describe any plans for the collection of this data in the future

FBT1.4

Do you implement agricultural management practices on your own farm(s) with a climate change mitigation and/or adaptation benefit?

FBT1.4a

Please identify agricultural management practices undertaken on your own farm(s) with a climate change mitigation and/or adaptation benefit. Complete the table

Activity ID	Agricultural management practice	Description of agricultural management practice	Climate change related benefit	Comment	
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FBT1.4b

Does your implementation of these agricultural management practices have other impacts? Complete the table

	Activity ID	Impact on yield	Impact on cost	Impact on soil quality	Impact on biodiversity	Impact on water	Other impact	Description of impacts	Comment		
FBT1.4	4c										
	Do you have any բ	olans to implement ag	gricultural managen	nent practices	in the future?						
FBT1.4	4d										
	Please detail your	plans to implement a	igricultural manage	ment practice	es in the future						
FBT1.5	5										
	ls biogenic carbor	n pertaining to your o	wn farm(s) relevant	to your clima	te change disc	losure?					
FBT1.5	āa										
	Please report biogenic carbon data pertaining to your own farm(s) in the table below										
	CO2 flux	Emissions/ Removals (metric tonnes CO2e)	Methodolog	у Е	xclusions	Explanation	Comment				

Do you account for greenhouse gas emissions from agricultural activities in your value chain as part of the Scope 3 category "Purchased goods and services" reported in CC14.1 of the core climate change questionnaire?

Yes

FBT1.6a

Please report these agricultural emissions from your value chain and identify any exclusions in the table below

Scope	Agricultural emissions (% of the emissions reported in the category "Purchased goods and services")	Exclusions	Explanation	Comment
Scope 3	21-30%	NA	Data Types and Sources – The scope of the emissions includes MCC, MCE, MCI. It covers, purchased raw materials and the raw material that are used to make processed ingredients. Primary activity data has been collected where possible. Where material purchase data has not been available (such as in MCI and for third party brewed products) educated assumptions have been made based on volume brewed or packaged. Emissions factors have been sourced from Ecoinvent database. Country specific or customised factors have been used where possible.	

FBT1.6b

Please explain why you do not account for greenhouse gas emissions from agricultural activities in your value chain as part of the Scope 3 category "Purchased goods and services" reported in CC14.1 of the core climate change questionnaire

FBT1.7

Do you encourage your agricultural suppliers to undertake any agricultural management practices with a climate change mitigation and/or adaptation benefit?

Yes

FBT1.7a

Please identify agricultural management practices with a climate change mitigation and/or adaptation benefit that you encourage your suppliers to implement. Complete the table

Activity ID	Agricultural management practice	Description of agricultural management practice	Your role in the implementation of this practice	Explanation of how you encourage implementation	Climate change related benefit	Comment
1	Knowledge sharing	Grower lead trials and knowledge sharing on topic of cover corps.	Knowledge sharing	Facilitating trial results and best practice sharing via grower group meetings.	Emissions reductions (mitigation)	

FBT1.7b

Does the implementation of these agricultural management practices in your value chain have other impacts? Complete the table

Activity ID	Impact on yield	Impact on cost	Impact on soil quality	Impact on biodiversity	Impact on water	Other impact	Description of impacts	Comment
1	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated	Not evaluated		

FBT1.7c

Do you have any plans to engage with your suppliers on their implementation of agricultural management practices?

Yes

Please detail these plans to engage with your suppliers on their implementation of agricultural management practices

We promote the use of sustainable agriculture practices, supporting our suppliers in the adoption of the six principles of our Agricultural Brewing Ingredients Policy (http://www.molsoncoors.com/-/media/molson%20cors%20corporate/policies/agricultural%20brewing%20ingredients%20policy.ashx?la=en):

- 1. Comply with Molson Coors quality specifications,
- 2. Adopt agricultural policies that strive to maintain soil fertility, water resources, air quality and biodiversity, and manage natural resources in an efficient manner,
- 3. Recognize the importance of accreditation and adopt it in farm assurance programs where appropriate,
- 4. Manage natural resources efficiently,
- 5. Meet food safety guidelines and traceability specifications, and
- 6. Understand and address any future guidelines, best practice and legislative change

Further Information

Page: FBT2. Processing

FBT2.1

Are processing activities, whether in your direct operations or elsewhere in your value chain, relevant to your climate change disclosure?

Yes

FBT2.1a

Please explain why processing activities are not relevant to your climate change disclosure

FBT2.2

Are the processing activities that	you have identified as relevant undertaker	in your direct operations	s, elsewhere in	vour value chain.	or both?

Elsewhere in value chain

FBT2.2a

Please explain why emissions from processing activities in your direct operations are not relevant

We do not own or operated processing activities.

FBT2.3

Do you account for emissions from processing activities in your direct operations as part of the global gross Scope 1 emissions figure reported in CC8.2 and/or the Scope 2 figure reported in CC8.3a of the core climate change questionnaire?

FBT2.3a

Please report these emissions from processing activities in your direct operations and identify any exclusions in the table below

Emissions from Scope processing activities Exclusions Expla (metric tonnes CO2e)	anation Comment
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FBT2.3b

Please explain why you do not account for emissions from processing activities in your direct operations, and describe any plans for the collection of this data in the future

FBT2.4

Do you account for emissions from processing activities in your value chain as part of the Scope 3 category "Purchased goods and services" and/o
"Processing of sold products" reported in CC14.1 of the core climate change questionnaire?

Yes

Further Information

Page: FBT3. Distribution

FBT3.1

Are distribution activities, whether in your direct operations or elsewhere in your value chain, relevant to your climate change disclosure?

Yes

FBT3.1a

Please explain why distribution activities are not relevant to your climate change disclosure

FBT3.2

Are the distribution activities that you have identified as relevant undertaken in your direct operations, elsewhere in your value chain, or both?

Both direct operations and elsewhere in value chain

FBT3.2a

Please explain why emissions from distribution activities in your direct operations are not relevant

FBT3.3

Do you account for emissions from distribution activities in your direct operations as part of the global gross Scope 1 emissions figure reported in CC8.2 and/or the Scope 2 figure reported in CC8.3a of the core climate change questionnaire?

Yes

FBT3.3a

Please report these emissions from distribution activities in your direct operations and identify any exclusions in the table below

Scope	Emissions from distribution activities (metric tonnes CO2e)	Exclusions	Explanation	Comment
Scope 1	17535	No exclusions	All material company-owned distribution is included and calculated based on fuel consumption. Logistics departments within production sites are counted within production sites. Emission from distribution is from off-site distribution facilities and the transport fuels consumed to get the products to customers.	
Scope 2	337	No material exclusions	We have very few owned and operated distribution facilities. This consumption is related to electricity use in warehouses in those few that we do operate.	

FBT3.3b

Please explain why you do not account for emissions from distribution activities in your direct operations, and describe any plans for the collection of this data in the future

FBT3.4

Do you account for emissions from distribution activities in your value chain as part of the Scope 3 category "Upstream transportation and distribution" and/or "Downstream transportation and distribution" in CC14.1 of the core climate change questionnaire?

Yes

Further Information

Page:	FBT4.	Consum	ption
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FBT4.1

Are emissions from the consumption of your products relevant to your climate change disclosure?

Yes

FBT4.1b

Please explain why emissions from the consumption of your products are not relevant to your climate change disclosure

FBT4.1a

Do you account for emissions from the consumption of your products as part of the Scope 3 category "Use of sold products" and/or "End of life treatment of sold products" in CC14.1 of the core climate change questionnaire?

Yes

Further Information

CDP 2017 Climate Change 2017 Information Request