Module: Introduction

Page: Introduction

CC0.1

Introduction
Please give a general description and introduction to your organization.

Eastman is a global specialty chemical company that produces a broad range of products found in items people use every day. With a portfolio of specialty businesses, Eastman works with customers to deliver innovative products and solutions while maintaining a commitment to safety and sustainability. Its market-driven approaches take advantage of world-class technology platforms and leading positions in attractive end-markets such as transportation, building and construction, and consumables. Eastman focuses on creating consistent, superior value for all stakeholders. As a globally diverse company, Eastman serves customers in approximately 100 countries and had 2015 revenues of approximately $9.6 billion. The company is headquartered in Kingsport, Tennessee, USA and employs approximately 15,000 people around the world.

CC0.2

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
Thu 01 Jan 2015 - Thu 31 Dec 2015

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

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($)

CC0.6

Modules

As part of the request for information on behalf of investors, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sub-industries, companies in the oil and gas sub-industries, companies in the information technology and telecommunications sectors and companies in the food, beverage and tobacco industry group should complete supplementary questions in addition to the main questionnaire.
If you are in these sector groupings (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will not appear below but will automatically appear in the 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. If you wish to view the questions first, please see https://www.cdp.net/en-US/Programmes/Pages/More-questionnaires.aspx.

Further Information

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

At the highest level, the Board of Directors' Health, Safety, Environmental and Security Committee, has formal oversight for environmental performance, including climate change programs, risks and opportunities. The purpose of the Health, Safety, Environmental and Security (HSES) Committee is to meet and review with management Eastman's policies and practices concerning all health, safety, environmental, security and sustainability matters. When appropriate, this committee also makes formal recommendations to the Board. Chaired by Julie Holder, the HSES committee is comprised of the independent, non-employee board.

CC1.2

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?	The type of incentives	Incentivized performance indicator	Comment
All employees	Recognition (non-monetary)	Energy reduction project Energy reduction target Efficiency project Efficiency target	Through the Eastman Employee Recognition Program, all employees are motivated to contribute to company energy efficiency projects, goals and targets through a variety of venues, including recognition for achievements in the company newsletter, individual awards team celebrations, notes of reinforcement and nominal prizes for participation.
Energy managers	Monetary reward	Energy reduction project Energy reduction target Efficiency project Efficiency target	Awards up to $1000 for playing key roles in achieving energy efficiency were given in the last year. Managers have discretion to use Eastman Team Recognition (ETR) cash awards to provide immediate reinforcement for energy efforts earning awards.
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction target Energy reduction target	Variable pay included in individual performance commitments with actual performance assessed in determination of annual cash.
Executive officer	Monetary reward	Emissions reduction target Energy reduction target	Variable pay included in individual performance commitments with actual performance assessed in determination of annual cash.

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	Globally, where Eastman has manufacturing sites	> 6 years	Eastman's process for managing the risks and opportunities associated with climate change is coordinated by a working team with guidance from the Executive Team and oversight by the Board of Directors. The Global Emerging Environmental Issues Working Team is chaired by the Director Global HSES Strategy and Security. This multi-functional team assesses emerging issues, including climate change, and develops and executes strategies that mitigate the risks and seize the opportunities across multiple functions at the company. This Director also facilitates the Environmental Stewardship Sub-council of the Eastman Sustainability Council to ensure management involvement and cross-functional alignment on strategies for addressing emerging environmental issues. The Environmental Stewardship Sub-council is led by the Chief Legal and HSES Officer who has authority over Company environmental policy and approves emerging issue strategies.

CC2.1b

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

Members of the Global Emerging Environmental Issues Working Team represent diverse functions including energy management, product stewardship, sustainability, innovation and life cycle analysis, legislative and regulatory advocacy, and marketing and public communications. These corporate functions are directly aligned with the manufacturing assets through the Company's utility operations, business organizations, and regional environmental permitting and compliance staff groups and product stewards. The Team captures insights from these diverse functions that lead to an improved cross-functional understanding of

the risks associated with emerging environmental issues as well as the opportunities that could offer a competitive advantage in the marketplace. At the company level, consistent messaging focusing on promoting energy efficiency while supporting climate change research is in place to drive awareness. Also at the company level, the business organizations are incentivized to develop innovative products to answer climate change mitigation and adaptation challenges, worldwide. At the asset level, the focus is on energy efficiency and is driven worldwide by an energy management function. The U.S. Environmental Protection Agency (EPA) has once again recognized Eastman Chemical Company (NYSE:EMN) with a 2016 ENERGY STAR® Partner of the Year - Sustained Excellence Award for the richness of its energy management program and continued leadership in superior energy management.
After being the first chemical company to be named ENERGY STAR Partner of the Year twice in 2012 and 2013, Eastman received the ENERGY STAR Partner of the Year - Sustained Excellence Award, EPA's highest ENERGY STAR honor, in 2014, 2015 and 2016.

CC2.1c

How do you prioritize the risks and opportunities identified?

The Global Emerging Environmental Issues Working Team analyzes climate change and other emerging issues in a systematic way with consideration given to each element of the Company's descriptive model for the Emerging Environmental Issues Process. Elements include business risks and opportunities associated with environmental impacts and resource limitations; potential legislation and government rulemaking; financial and operating impacts; market driven forces from customers, retailers and consumers; and, impacts on other stakeholders including employees, stockholders, communities and NGOs. Risks and opportunities are identified and rated in terms of low or high impact and low or high probability, as well as, ability to influence. Mitigation strategies are developed for risks and opportunities which the Company can influence that are characterized high-high for both impact and probability. Consideration is also given to issues which the Company can influence that are less probable but high in impact or low in impact but highly probable. Company strategies in response to climate change are diverse, short and long term. Strategies focused on increased energy efficiency are driving change in manufacturing and in product development. Eastman's largest plant site is in the process of converting 50% of its steam and electric generating capacity from coal-fired boilers to natural gas and by the end of 2018 will cut coal use at the site by 50 percent. Energy efficiency standards are driving innovation in the Company's transportation and building construction offerings including lighter, more functional advanced materials for automobiles and performance films, interlayers and insulated glass sealants for more energy efficient buildings.

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

CC2.2

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.Eastman's business strategy clearly reflects an emphasis on energy reduction. Since 2008, Eastman has improved energy intensity by approximately 9%, equating to a reduction in greenhouse gas emissions of more than one billion pounds. The reduction is equivalent to the CO2 emissions from energy used by over 52,000 homes and allowed Eastman to avoid an estimated $30 million in energy cost in 2015.
Eastman's energy program is a corporate program with broad participation and executive-level support that uses ENERGY STAR resources, corporate initiatives, and designated funding to improve energy efficiency. Energy efficiency is a key part of achieving sustainability goals, such as a 20% reduction in greenhouse gas (GHG) emissions. The CEO, CSO, and Chief Manufacturing E&C Officer along with manufacturing managers have individual performance commitments that include tracking of energy efficiency improvements.
The Energy Manager participates on the Sustainability Council, which provides oversight of the energy program's executive steering team. At their direction, the executive steering team was renamed the Design and Natural Resources (D&NR) Sustainability Sub-Council. The team structure and membership promotes closer ties with energy efficient design and includes other natural resources such as water, knowing that energy conservation strategies can be applied to other natural resources.
ii. For Eastman, sustainability drives innovative products, that make the world a better place and also motivates a company-wide focus on reducing waste, carefully managing resources and conserving energy throughout operations.
Energy efficiency is a key part of achieving sustainability goals and has greatly influenced strategy. With a greater understanding of energy use patterns and trends, and through detailed analysis using historical information, anticipated improvements and budgeted funds, the energy intensity reduction goal was set at 20% reduction by 2020. The baseline of 2008 was used which was the year Eastman became an ENERGY STAR Partner and began using the Guidelines for Energy Management.
iii. Many recognized changes in operations, such as lighting improvements and award-winning energy saving buildings, are examples of short-term changes that will generate long-term operational strategy improvements and resulted from internal attention to climate change. A tracking of annual energy targets is also conducted resulting in cost-savings. The meter program demonstrates Eastman's commitment to accuracy of measurement. Over the last nine years, more than $7.5 million (M) has been spent on meters. The metering strategy now relies more heavily on utility correlation tools that can accurately predict energy use at the product level. The utility correlation tool contains multiple linear regression models that correlate daily historic utility demand and production output. Eastman's combined heat and power technology also generates long-term benefits affecting climate change and reduction of the carbon footprint.
iv. In 2013, Eastman announced plans to convert boilers at its manufacturing sites in Kingsport, Tennessee, and Springfield, Massachusetts, from coal to natural gas. The conversion of these boilers is expected to achieve significant reductions in greenhouse gas and other emissions, in addition to helping the company reach its emissions goals. When completed in 2018, the Kingsport project will reduce greenhouse gas emissions by 20%, the equivalent of eliminating emissions from 20,000 cars.
Natural resource efficiency and climate change strategy has also driven several recent product development efforts including the following:

- Eastman BioExtend™ 30 and BioExtend™ 30 HP antioxidant solutions were developed and are marked to extend the shelf life of biodiesel and slow down the

oxidation process.
• Saflex® PVB interlayers, an advanced interlayer technology for laminated glass that brings safety, security, acoustic, UV screening and reduction in summer solar heat gain to automotive and architectural glazing.
v. Eastman became a Better Building, Better Plants partner in 2010, and in 2014 increased its commitment by becoming a Challenge Partner in the Department of Energy (DOE) program. At the Challenge Partner level, Eastman exhibits strategic advantage and commitment to a higher level of transparency.
Better Buildings, Better Plants Challenge partners strive to decrease portfolio-wide source energy use intensity (EUI), and to increase the percent improvement compared to a set baseline. Eastman's portfolio consists of 9 plants as of 2015. Eastman's energy management program emphasizes employee engagement, rigorous data tracking, innovative technology solutions, replication of best practices, standardized energy initiatives, the execution of energy efficiency projects, and the incorporation of energy efficiency in capital investments. Eastman's recent focus has been on developing very robust data tracking methodologies and reporting tools. Beginning with the 2014 data, Eastman adopted a new methodology for tracking energy efficiency improvement at its facilities that normalized for weather and production with an energy intensity improvement of approximately 9% since its baseline year of 2008.
As a Challenge Partner, Eastman has a page on the DOE website https://www4.eere.energy.gov/challenge/partners/better-buildings-better-plants/eastman-chemical Currently a showcase project, Eliminating Hydrogen Plant Natural Gas Compressors, which is representative of $1M or more, has been completed and is highlighted on the site. Eastman is the only chemical company to obtain the sustained excellence award through ENERGY STAR® and has been honored as an ENERGY STAR® Partner of the Year in 2012, 2013, 2014, 2015 and 2016.
vi. Macro trends developing globally present both business opportunities and risks for Eastman. As our company evolves, the macro trends driving our corporate business and sustainability strategies continue to evolve, too. With the recent acquisition of Taminco, we now have an increased focus on the global trend to feed a growing population as supported by solutions in the food, feed and agriculture markets.

CC2.2b

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

CC2.2c

Does your company use an internal price of carbon?

Yes

CC2.2d

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

i. Eastman regularly uses the price of carbon in the regions where we are participating in a carbon trading operation with more detail as follows:
ii. Energy saving projects include the additional value of reduced carbon emissions, and they are priced based on the expected price of carbon emissions by country. This is part of Eastman's corporate model through scenarios and forecasts for energy based on countries and situations where there will be a carbon tax and carbon trading system.
iii. Internal pricing of carbon is component of financial analysis for anticipating impact of carbon pricing on business and investment decisions.
iv. Where there is not an emissions trading scheme, renewable energy credit pricing is sometimes used as part of the cost of carbon scenarios.
v. Pricing is usually tied to a market procurement uses forecast prices from brokers based on the forward curve and energy forecasts. This is always tied to where Eastman has assets.
vi. An example of how carbon pricing affects investment decisions are energy efficiency projects, which result in a reduction of future costs. If internal pricing of carbon is an expansion in growth it is a higher cost with a negative impact. Energy efficient enabled materials are also considered on a sales side.

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
Other: Ocean Research	Support	The Eastman Global Public Affairs and Policy group engage with policy makers and urge the development of laws based on sound science. With regards to the science of climate change, they represent the company position that a better understanding of the role of the oceans would enable scientists to improve climate models and reduce uncertainties.	Increase funding of ocean research to yield data that contributes to more informed policy making.
Energy efficiency	Support	Eastman has engaged the US Department of Energy, Oak Ridge National Laboratory and Lawrence Berkeley National Laboratory and the US EPA in support of our efforts to promote energy efficiency at our largest sites. Our efforts have led Eastman to be named as an ENERGY STAR Partner of the Year for five consecutive years.	None

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
Clean energy generation	Support	Eastman advocates broad definitions of clean energy to allow new and innovative approaches as well as promotion of combined heat and power for more efficient use of traditional fuels.	
Other: Combined Heat and Power	Support	Eastman uses combined heat and power for the majority of our steam and electricity needs. Eastman works with policy makers and agencies like DOE and EPA to create legislation and regulations that encourage additional use of efficient combined heat and power to reduce power demand from less efficient, traditional power generation plants.	

CC2.3b

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

Yes

CC2.3c

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

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?
ACC	Mixed	The American Chemistry Council does not have a published policy on climate change legislation and is generally neutral on that subject. ACC supports legislative proposals to improve energy efficiency and/or promote the increased use of materials that enable renewable energy, energy efficiency, etc. ACC generally opposes regulatory approaches that it believes will impose significant costs on the chemical industry.	Eastman encourages ACC to support legislation that promotes energy efficiency. Eastman also worked through ACC to get lawmakers to correct provisions in proposed carbon trading legislation that would have been a problem when applied to the chemical industry.
Business Roundtable		Business Roundtable's position on climate change is consistent with Eastman's and is explained as follows: Access to reliable, affordable energy undergirds U.S. national and economic	Eastman recognizes customer innovation is crucial in sustainable solutions and transparency in accountability both up and downstream with supply chains is imperative to the

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?
		security, and a clean, healthy environment is essential for economic prosperity now and for future generations. Business Roundtable supports policies that capitalize on America's strengths in technology and energy diversity to maximize U.S. energy options and preserve environmental quality. The business community has a special obligation to step forward and help build an environmentally and economically sustainable future. Because the consequences of global warming for society and ecosystems are potentially serious and far-reaching, Business Roundtable believes that steps to address the risks of such warming are prudent and supports collective actions that will lead to the reduction of greenhouse gas emissions on a global basis.	changing world and sustainability. For this reason, Eastman became a signatory member of the United Nations Global Compact (UNGC). The UNGC assists in managing risks and opportunities in "complex environmental, social and government realms" with universal principles. Participating companies utilize an accountability policy, Communication on Progress (COP), which exhibits a commitment to transparency. Eastman was also the first U.S.-based company to join Together for Sustainability (TfS). TfS was established "to develop and implement a global audit program to assess and improve sustainability practices within the supply chains of the chemical industry." With four acquisitions in 2014, Eastman experienced unprecedented growth, making the transparency provided by TfS assessments and audits an advantageous bio-sustainability project for continuously improving the overall portfolio and environmental footprint worldwide.

CC2.3d

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

Although Eastman does not have a board position on the 2015 United Nations Climate Change Conference, we are committed to actions that reduce the impact of our operations on the environment and to the production of products that help our customers lessen their environmental footprint or adapt to future changes in our climate. We support the goal of transforming the world into a competitive, low-carbon economy while ensuring a level global playing field among all major economies. We believe the ocean is a fundamental driver of our climate system and we support greater funding of ocean research to better understand the timing,

location and impacts of climate change to help inform effective solutions. To that end, Eastman financially supports ocean science in a way that absolutely maintains independence and academic freedom of researchers.

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?

Members of the Global Emerging Environmental Issues Working Team represent diverse functions including energy management, product stewardship, sustainability, innovation and life cycle analysis, legislative and regulatory advocacy, and marketing and public communications. These corporate functions are directly aligned with manufacturing through the Company's utility operations, business organizations, and regional environmental permitting and compliance staff groups and product stewards. The Team captures operations management insights from these diverse functions that lead to an improved cross-functional understanding of the risks associated with emerging environmental issues as well as the opportunities that could offer a competitive advantage in the marketplace. Comprehensive strategies are developed and roles and responsibilities are assigned to ensure coordinated, consistent internal and external messaging. Additionally, a top-down led Sustainability Council composed of 4 Executive Team members and 3 Vice Presidents, have overall governance responsibility for sustainability strategy and prioritization of company level issues and goals.

CC2.3g

Please explain why you do not engage with policy makers

Further Information

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

CC3.1a

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

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%	20%	Metric tonnes CO2e per unit of production	2008	1.02	2020	No, and we do not anticipate setting one in the next 2 years	Eastman is committed to actions that reduce the impact of our operations on the environment and to the production of products that help customers lessen their environmental footprint to adapt to future changes in our climate. We support the goal of transforming the world into a competitive, low-carbon economy while ensuring a level global playing field among all major economies.

CC3.1c

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	12			We decreased absolute emissions through energy efficiency projects and conversion of some of our major combustion sources from coal to natural gas.

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

CC3.1e

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	50%	0%	Eastman has acquired over 20 manufacturing sites since the baseline year of 2008 was set. The emissions from the acquisitions have impacted the total emissions generated. Eastman prefers an intensity metric instead of absolute emissions. However, Eastman has readjusted baseline emissions and intensity by including emissions from acquisitions.

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
Company-wide	Alternative Methods of Supply – Several large global capacity oxo and acetyl derivatives.	Avoided emissions	Addressing the Avoided Emissions Challenge-Chemicals sector			Calculated avoided emissions for Eastman's use of bilateral agreements to reduce logistical emissions associated with fulfilling international contracts. The reduction represented approximately 5% of the total cradle-to-customer carbon emissions for products sold using bilateral agreements.

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	142	
To be implemented*	51	49000
Implementation commenced*	12	66000

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Implemented*	9	71000
Not to be implemented	91	

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	In 2015, Eastman received ten American Chemistry Council (ACC) energy efficiency awards for projects for the 22nd consecutive year honoring projects that have achieved distinction in reducing energy consumption and GHG. These projects alone saved over 221,000MM BTUs and 14,000 tons of GHG emissions annually, which represents enough energy to power over 1,800 homes and eliminate GHG emissions for over 2,700 cars. Winning projects	181000	Scope 1	Voluntary	7300000	7992000	1-3 years	11-15 years	These implemented projects are in North America locations.

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
	include – heat recovery systems, building energy reduction, energy optimization of distillation columns, and hot water recycling. All exhibit innovative examples of trials with new types of equipment, creative process redesign, operational changes and employee commitment to the corporate energy program. Implemented multiple projects focused on improving energy efficiency. Projects included equipment optimization, lighting upgrades, implementing new process control strategies, heat integration, leak repairs, and heat recovery.								
Energy efficiency: Building services	Upgraded building automation systems and added occupancy schedules, eliminated unnecessary equipment, and informed building occupants of actions they could take to save energy.	1100	Scope 2 (location-based)	Voluntary	150000	440000	1-3 years	11-15 years	This project was implemented in North America locations only.
Low carbon energy installation	Converted coal fired boiler to natural gas	62000	Scope 1	Voluntary	0	4600000	16-20 years	>30 years	This project converted a coal fired boiler to natural gas at our site in Springfield, MA.

CC3.3c

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

Method	Comment
Dedicated budget for energy efficiency	Eastman's capital energy budget continues to be supported by upper management and remained at $8 million for 2015. In addition, a $3.4 million expense budget was allocated to improve energy efficiency primarily through steam leak repair and adding/replacing insulation. Eastman's business strategy clearly reflects an emphasis on energy reduction. Since 2008, Eastman has improved energy intensity by approximately 9%, equating to a reduction in greenhouse gas emissions of more than one billion pounds. The reduction is equivalent to the CO2 emissions from energy used by over 46,000 homes and allowed Eastman to avoid $30 million in energy cost in 2015. Energy efficiency is a key part of achieving sustainability goals, such as a 20% reduction in greenhouse gas (GHG) emissions. Eastman's energy strategy is depicted as a puzzle with each current component represented by a puzzle piece, including energy awareness, goals and measures, knowledge resources, site wide initiatives and energy efficiency projects. The "open" puzzle leaves room for additional aspects as they are discovered for optimal energy performance.
Compliance with regulatory requirements/standards	Current regulatory requirements are reinforcing fuel conversion that results in lower GHG.
Employee engagement	To guide and direct corporate-wide energy efforts, an annual energy communications plan is developed and continually updated. To build support in energy management at all levels, the Energy Team has used awareness campaigns. Improved employee awareness resulted in measurable energy reductions. To motivate employees, recognition programs are used along with team celebrations and verbal and written reinforcement. Site energy managers who fulfilled site expectations were recognized by Eastman's CEO. Performance commitments of all personnel include goals and objectives for each year, and performance against these goals is a factor in determining compensation. Employees are motivated to contribute to company energy efficiency goals through a variety of venues including recognition for achievements in the company newsletter, individual awards, team celebrations, notes of reinforcement and nominal prizes for participation. Eastman's largest site held energy efficiency events with a focus on building energy efficiency and home energy awareness. Investing in training in 2015 to build capacity and ensure the continued success of Eastman's energy program also included adding special topic meetings covering building efficiency and condensate recovery with an extended invitation to all interested parties as well as seminars that addressed common questions about energy efficiency.
Other	Eastman continues to achieve gains in building energy efficiency improvements. A warehouse was recognized by EPA for achieving a 20% energy use reduction during EPA's National Building Competition. The number and members of Office Green Teams also continues to grow and contribute to this success. Three buildings have been ENERGY STAR® certified again with their ratings improving over the previous year. Eastman utilizes benchmarking to further enhance its program by using ENERGY STAR Portfolio Manager for office building and warehouse comparisons. The success of Eastman's energy program was validated with other awards, including ENERGY STAR Partner of the Year – Sustained Excellence for the 3rd consecutive year and ENERGY STAR Challenge for Industry recognition.

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	Status	Page/Section reference	Attach the document	Comment
In voluntary communications	Complete	34-46	https://www.cdp.net/sites/2016/69/5169/Climate Change 2016/Shared Documents/Attachments/CC4.1/SustainabilityReport_2015_all.pdf	

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
Uncertainty surrounding new regulation	The business planning process must address mandatory constraints in place due to government regulation. When these constraints are understood and also apply to company competitors the planning process can address the constraints in terms of capital and operational strategy and there is the opportunity to create advantage by achieving more cost-effective compliance than the competitors. Uncertainty associated with new regulation gives the	Increased operational cost	3 to 6 years	Direct	Virtually certain	High	Unknown. Actual costs are dependent on the details of any passed legislation and the extent to which capital investments and operational decisions made prior to the legislation correctly predicted what the future held. Additionally, lost revenue and earnings impacts are tied	Compliance driven response depending on the requirements. Active monitoring and response from Global Emerging Environmental Issues Working Team. Business Strategy annual review and modeling.	Significant staff time is spent anticipating and managing new regulations and developing strategies to advantage the Company. This occurs across multiple functions including: Global Environmental Affairs, Marketing, Business Strategy, HSES, Sustainability, Innovation and

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	competitive advantage to the firm best able to predict the future. Firms that make capital investments in anticipation of rulemaking are often penalized, e.g. when emission reductions are achieved prior to the base year established by the rule and are not included as credits in the emission reduction requirements. Product selection/deselection consequences are also part of the risks from changes in regulations and active monitoring as part of the annual planning cycle which helps anticipate such events.						to actual product and application outcomes.		Technology and Legal.

CC5.1b

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
Uncertainty of physical risks	Climate change induced changes in weather patterns and sea levels have the potential to disrupt as well as benefit business. Predicting the timing, location, and impacts of climate change is central to our ability to develop informed and effective solutions. At present, planning for the future is difficult because of the scientific uncertainties and one of the biggest limitations is the lack of understanding of ocean processes and their implications for climate change. Severe weather patterns are increasing and present risks to the safety and security of our global supply chains. Improved predictability of weather patterns	Other: Actual impacts are unknown and depend on timing, location and the nature of any disruptions.	Unknown	Direct	Unknown	Unknown	Climate change could bring costs and benefits depending on how well we adapt and mitigate. Additionally, adverse weather conditions in the US in 2014 accounted for a record number of bulk terminal and port closures impacting on time delivery reliability.	Eastman is closely following the science of climate change and, in particular we are collaborating with scientists to better understand the potential implications. In the Supply Chain, logistics operations monitor for potential impacts on supply/demand and takes corrective action to minimize/avoid negative consequences.	Current costs are limited to staff time following the issue and investments in the support of climate change research. For Supply Chain, logistics operations worked with supply chain execution to monitor and adjust for minimal disruption.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	from improved ocean research would allow for a better prepared response to physical climate changes.								

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
Fluctuating socio-economic conditions	Clearly, on a local and regional scale there will be those that experience negative or positive socioeconomic changes. Predicting these changes is difficult given the uncertainties associated with the timing, location, and impacts of climate change.	Other: Actual impacts are unknown and depend on timing, location and the nature of any disruptions.	Unknown	Direct	Very likely	High	Climate change could bring costs and benefits depending on how well we adapt and mitigate.	Eastman is following the science of climate change to better understand time-scale and potential implications.	Current costs are limited to staff time following the issue and investments in the support of climate change research.

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 physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC5.1f

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
Product efficiency regulations and standards	Eastman is a major supplier to the transportation and building materials markets. Energy efficiency standards applicable to these markets are already creating demand for innovative Eastman products that offer improved energy efficiencies and lower GHG	New products/business services	1 to 3 years	Direct	Virtually certain	Medium	Responding to the demand for products that save energy and reduce GHG emissions is a major growth area for the company and is expected to make significant contributions to the bottom line. Eastman tracks its new product launch revenues that	The Eastman corporate strategy calls for driving innovation to address macro-trends such as health and wellness, an emerging middle class, feeding a growing population and natural resource efficiency (which includes energy, climate change and water stewardship). This strategy is	Costs associated with the management of this business opportunity are not different from other management costs. Eastman has been active through World Business Council for Sustainable Development projects to create guidelines to accurately assess and assign avoided emissions

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	emissions. Supplying the demand for these types of products is a core of our business.						have a more sustainable profile and many of these are more energy efficient, offer longer life, and/or improve performance.	communicated throughout the company and performance expectations and incentives are in place to drive success. Adaptation and green business initiatives are clear long term drivers in the Company's efforts to advance leading positions in attractive end-markets such as transportation, building and construction, and agriculture where innovative products yield natural resource efficiencies.	benefits from chemicals in materials across the value chain where our products are found. This is a strategic investment to show the benefits our materials bring in use and help create overall demand through improved understanding.

CC6.1b

Please describe the 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 (average) temperature	i)Demand for Eastman products that deliver more comfort and energy efficiency could increase with changes in mean temperature. Eastman offers solutions that are part of applications providing weather and safety protection, and harsh climate conditions are often a driver for such solutions. Examples include: Eastman additives that go into paints and varnishes and provide protective coatings for harsh weather and climate conditions; Eastman cellulose acetate butyrate (CAB) which is found in the coating on the restoration of one of Mexico's symbols of freedom, the El Angel de la Independencia; Eastman EnerLogic® window film which provides UV ray protection in architectural	Increased demand for existing products/services		Direct	Virtually certain	Medium	Responding to the demand for products that save energy and reduce GHG emissions is a major growth area for the company and is expected to make significant contributions to the bottom line. Severe weather patterns can be disruptive to companies along a value chain as they pose significant risk to safe shipping and use of materials from raw material to consumer use. Leveraging resilient supply chains enable	The Eastman corporate strategy calls for driving innovation to address macro-trends such as health and wellness, an emerging middle class, feeding a growing population and natural resource efficiency (which includes energy, climate change and water stewardship). This strategy is communicated throughout the company and performance expectations and incentives are in place to drive success. Adaptation and green business	Costs associated with the management of this business opportunity are not different from other management costs.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	applications offering as much as 92% more insulation to glass; and Eastman Saflex® PVB interlayers provide solar heat benefits, exceptional durability when exposed to natural weathering and security and storm protection. ii) In addition, Eastman's integrated global supply chain has a strong track record of delivery reliability without distribution incident, setting records in 2013 for best ever performance on distribution incidents per thousand shipments (page 61 of report). This year, another achievement is safe handling and shipping occurred when through the collective efforts of Eastman's Global Logistics and Manufacturing/Material Handling teams at our Anniston, Chestertown, Indian Orchard, Kingsport, Jefferson, Longview,						Eastman to participate in meeting the needs of downstream customers in the midst of disruptions that may stop other companies without such strength. Additionally, during consumer use, the breadth of Eastman products that provide benefits in overcoming severe weather or environmental concerns like UV protection.	initiatives are clear long term drivers in the Company's efforts to advance leading positions in attractive end-markets such as transportation, building and construction, and agriculture where innovative products yield natural resource efficiencies. The Integrated Global Supply Chain manages global processes across a network of trusted suppliers and customers imbeds performance tracking, reporting, and supplier	

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	Monongahela, Pace, St Gabriel, Sauget, Texas City and Trenton sites safely shipped over 30,000 rail cars of hazardous materials. These achievements validate the efforts of Eastman employees toward delivering consistent, superior value for our stakeholders while maintaining a strong commitment to safety and the environment, and reflect the supply chain resiliency Eastman provides in the face of severe weather occurrences and patterns.							excellence award recognitions as just a few of the ways to deliver continued success and management oversight.	

CC6.1c

Please describe the 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
Changing	Demand for	Increased	1 to 3	Direct	Virtually	Medium	Responding to	The Eastman	Costs

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
consumer behaviour	Eastman products that deliver more energy efficiency could increase with changing consumer behavior. These product offerings are necessarily more expensive than non-efficient competing products. Consumer behavior driven by the desire to save energy and lower the individual's carbon footprint could drive demand. Other types of demands include the need for crop protection products that inhibit mold and extend the life of food products during the growth phase. Weather related side effects like water (flooding or drought) and growth of microorganisms are examples of	demand for existing products/services	years		certain		the demand for products that save energy and reduce GHG emissions is a major growth area for the company and is expected to make significant contributions to the bottom line. The breadth of Eastman products providing benefits in overcoming severe weather or environmental concerns provides a source of revenue in increasingly turbulent weather related climates.	Corporate Strategy calls for driving innovation to address macro-trends such as health and wellness, an emerging middle class, feeding a growing population and natural resource efficiency (which includes energy, climate change and water stewardship). This strategy is communicated throughout the company and performance expectations and incentives.	associated with the management of this business opportunity are not different from other management costs.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	climate-related issues that also provide opportunities to Eastman in our Food, Feed and Ag markets. We also have other solutions to positively impact drinking water shortages caused by contaminated water sources during emergencies in our cellulose acetate membrane filter that go into products like HTI's HydroPack™. Finally, our largest manufacturing site is located away from areas of the world typically associated with severe climate events, and this location provides some degree of resiliency and security of supply protection for our customers.								

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 physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC6.1f

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	Tue 01 Jan 2008 - Wed 31 Dec 2008	5836519
Scope 2 (location-based)	Tue 01 Jan 2008 - Wed 31 Dec 2008	1564040
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)

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 Fourth Assessment Report (AR4 - 100 year)
N2O	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	IPCC Fourth Assessment Report (AR4 - 100 year)
PFCs	IPCC Fourth Assessment Report (AR4 - 100 year)
SF6	IPCC Fourth Assessment Report (AR4 - 100 year)
CO2	IPCC Fourth Assessment Report (AR4 - 100 year)

CC7.4

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
Natural gas	117.1	lb CO2e per million BTU	EPA Climate Leaders GHG Inventory Protocol - Stationary Combustion Sources Guidance
Liquefied petroleum gas (LPG)	136.61	lb CO2e per million BTU	2013 Revisions to EPA's Greenhouse Gas Reporting Rule
Residual fuel oil	166.13	lb CO2e per million BTU	2013 Revisions to EPA's Greenhouse Gas Reporting Rule
Bituminous coal	207.3	lb CO2e per million BTU	2013 Revisions to EPA's Greenhouse Gas Reporting Rule
Distillate fuel oil No 2	163.61	lb CO2e per million BTU	2013 Revisions to EPA's Greenhouse Gas Reporting Rule

Further Information

Page: CC8. Emissions Data - (1 Jan 2015 - 31 Dec 2015)

CC8.1

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

Financial control

CC8.2

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

5940915

CC8.3

Does your company have any operations in markets providing product or supplier specific data in the form of contractual instruments?

No

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
786571		

CC8.4

Are there are 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?

Yes

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
We are excluding emissions from the Taminco businesses which we acquired in December 2014. We are also excluding emissions from Eastman sales offices and some joint venture sites.	Emissions are relevant but not yet calculated	Emissions are relevant but not yet calculated		There is a goal to include new sites within three years of acquisition. The energy program has grown from 8 sites in 2010 to 19 sites today. Joint venture sites that are excluded represent less than 4% of our total emissions.

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%	Data Gaps Assumptions Extrapolation Metering/ Measurement Constraints	Scope 1: The uncertainty is based on meters, changing weather conditions and production rates, and all factors can influence usage. Meter variably is the main source of uncertainty on accuracy.
Scope 2 (location-based)	More than 2% but less than or equal to 5%	Metering/ Measurement Constraints	Scope 2: Eastman makes assumptions on the efficiency of our providers, such as local power plants, with publically provided state data, and estimates are made on published site numbers.
Scope 2 (market-based)			

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	Reasonable assurance	https://www.cdp.net/sites/2016/69/5169/Climate Change 2016/Shared Documents/Attachments/CC8.6a/Verificatierapport 2015 Eastman Chemical Middelburg B.V.pdf	1-6	European Union Emissions Trading System (EU ETS)	100
Annual process	Complete	Reasonable assurance	https://www.cdp.net/sites/2016/69/5169/Climate Change 2016/Shared Documents/Attachments/CC8.6a/Oulu_VerificationStatement_31-03-16-12-26.pdf		European Union Emissions Trading System (EU ETS)	
Annual process	Complete	Reasonable assurance	https://www.cdp.net/sites/2016/69/5169/Climate Change 2016/Shared Documents/Attachments/CC8.6a/EJR-2015-VERVL103-geverifieerd-20160314_095235.pdf		European Union Emissions Trading System (EU ETS)	
Annual process	Complete	Reasonable assurance	https://www.cdp.net/sites/2016/69/5169/Climate Change 2016/Shared Documents/Attachments/CC8.6a/Form.pdf		European Union Emissions Trading System (EU ETS)	

CC8.6b

Please provide further details of the regulatory regime to which you are complying that specifies the use of Continuous Emissions 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

No third party verification or assurance

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 (%)

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

Additional data points verified	Comment
Other:	As part of Responsible Care, some sites are 3rd party audited. GHG emissions are part of that audit.

CC8.9

Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No

CC8.9a

Please provide the emissions from biologically sequestered carbon relevant to your organization in metric tonnes CO2

Further Information

Page: CC9. Scope 1 Emissions Breakdown - (1 Jan 2015 - 31 Dec 2015)

CC9.1

Do you have Scope 1 emissions sources in more than one country?

Yes

CC9.1a

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

Country/Region	Scope 1 metric tonnes CO2e
Asia Pacific (or JAPA)	49843
Europe	67108
Latin America (LATAM)	5500
North America	5823965

CC9.2

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

CC9.2a

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

Business division	Scope 1 emissions (metric tonnes CO2e)

CC9.2b

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

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude

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 2015 - 31 Dec 2015)

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)
Asia Pacific (or JAPA)	102308		599084	0
Europe	10024		105181	0
Latin America (LATAM)	5000		21190	0
North America	584239		1583167	300800

CC10.2

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

CC10.2a

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

Business division	Scope 2 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, market-based (metric tonnes CO2e)

CC10.2b

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

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

CC10.2c

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

Activity	Scope 2 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, 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	Energy purchased and consumed (MWh)
Heat	0
Steam	2285917
Cooling	0

CC11.3

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

15261033

CC11.3a

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

Fuels	MWh
Natural gas	4890209
Liquefied petroleum gas (LPG)	39478
Distillate fuel oil No 2	58575
Residual fuel oil	47802
Bituminous coal	10225029

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	Comment

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

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	4	Decrease	Decreased emissions through energy efficiency and conversion from coal to natural gas.
Divestment	0	No change	Eastman did not have any divestments.
Acquisitions	0	No change	Taminco acquisition will be included in 2017 CDP.
Mergers	0	No change	Eastman did not have any material mergers.
Change in output	0	No change	
Change in methodology	0	No change	Eastman did not have a change in methodology.
Change in boundary	0	No change	Eastman did not change boundary.
Change in physical operating conditions	0	No change	Eastman did not have any material changes in physical operating conditions.
Unidentified			
Other			

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
0.0007	metric tonnes CO2e	9.6	Location-based	5	Decrease	Because energy efficiency is the low cost option for achieving GHG reduction, Eastman focuses on energy efficiency projects to achieve our goals. Conversion of fuel sources to fuels with lower GHG generation also aids in achieving our target. Eastman chooses GHG intensity for our goals because of rapid growth through acquisition.

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
0.90	metric tonnes CO2e	unit of production		Location-based	3	Increase	Eastman focuses on energy efficiency projects to achieve our GHG intensity reduction goals. Eastman's business strategy clearly reflects an emphasis on energy reduction. Since 2008, Eastman has decreased energy intensity by approximately 9%, equating to a reduction in greenhouse gas emissions of more than one billion pounds. The reduction is equivalent to the CO2 emissions from energy used by over 46,000 homes. Energy costs of $30 million were avoided in 2015. Eastman's energy program is a corporate program with broad participation and executive-level support that uses ENERGY STAR resources, corporate initiatives, and designated funding to improve energy efficiency. Energy efficiency is a key part of achieving sustainability goals, such as a 20% reduction in greenhouse gas (GHG) emissions intensity. The CEO, CSO, Chief Manufacturing E&C Officer, and manufacturing managers have individual performance commitments that include tracking of energy efficiency improvements. Conversion of fuel sources to fuels with lower GHG generation also aids in meeting our target. Eastman chooses GHG intensity based on emissions per unit of production for our goals, rather than an absolute reduction, because of rapid growth through acquisition.

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	Thu 01 Jan 2015 - Thu 31 Dec 2015	167930	86000	234291	Facilities we own and operate

CC13.1b

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

Eastman's current strategy regarding allowance trading under all emission trading schemes is to properly manage the compliance obligations of facilities worldwide by pursuing operating efficiency improvements wherever possible to minimize compliance obligation. Eastman will also purchase allowances/compliance instruments to satisfy compliance obligations. If allowances allocated to the company exceed the current compliance obligations, allowances are retained for future compliance needs. Eastman does not trade allowances speculatively.

CC13.2

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

No

CC13.2a

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	Project identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits cancelled	Purpose, e.g. compliance

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	7313000	Primary data for mass of raw materials purchased as chemical feedstocks were used. Cradle-to-purchase GHG emissions factors for 89% (by mass) of purchased raw materials were available, largely from the PE/thinkstep GaBi	89.00%	Primary data for the mass of raw materials purchased were available for 100% of raw materials. Secondary data for GHG emissions for 89% of

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
			2015 LCI dataset. A small fraction of raw materials' GHG emissions factors were derived from USLCI or supplier-specific datasets. GHGs emitted during generation of energy feedstocks (accounted for elsewhere in CC14.1 Scope 3 emissions) were excluded. Cradle-to-purchase GHG emissions for 89% by mass of purchased raw materials were calculated and the result then scaled up to estimate GHG emissions of 100% of raw materials purchased.		mass of purchased raw materials were available. Change from 2014: Inclusion of fuel cycle (coal mining) emission are included. Other mass (natural gas, steam) is not included. To include it (as was done in 2014) would double count scope 1&2 emissions.
Capital goods	Not relevant, explanation provided				In order to evaluate the relevance of capital on Eastman's total footprint, GHG emissions were estimated based on capital goods expenses for FY2015. The impact of the activity was estimated using Carnegie Mellon's economic input/output (EIO) LCA tool (http://www.eiolca.net/cgi-bin/dft/use.pl). Because annual GHG emissions from purchased capital goods are estimated to be 200,000 tons of CO2, which is <5% of Eastman annual Scope 1, Scope 2 and Scope 3 emissions, it is reasonable to conclude that emissions from purchased capital goods are not relevant to this study.
Fuel-and-energy-related activities (not included in	Relevant, calculated	1642303	Primary data regarding the electricity and fuel use identified in the 2015 Scope 1 and 2 Eastman GHG emissions were used. For each fuel type and region, GHG emission factors were identified largely from the commercially available LCA	50.00%	100% primary data from purchasing were used to identify annual fuel and energy purchased. Secondary data from purchased PE/thinkstep GaBi

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
Scope 1 or 2)			database PE/thinkstep GaBi 2015. GHGs emitted during generation of purchased electricity and already reported as Scope 2 emissions were subtracted.		2015 datasets were used to determine specific cradle-to-purchase GHG emission factors for each purchased fuel or energy feedstock.
Upstream transportation and distribution	Not relevant, explanation provided				In a product life cycle analysis (LCA), when Eastman has included the impact of transportation, it has been the impact of shipping a product to a customer. In considering, the “cradle to gate” analysis, the carbon emissions are less than one percent, which also serves as a good indicator for measurement and is applicable to upstream transportation. Even though overall transportation is not a hot spot for Eastman, studies are still being conducted on reducing the impact.
Waste generated in operations	Not relevant, explanation provided				Eastman reports the annual quantity of carbon dioxide equivalents (CO2e) emitted by sources subject to the EPA Greenhouse Gas Mandatory Reporting Rule, including the estimated CO2e of methane generated by our on-site solid waste landfill resulting from all subject wastes disposed in the landfill between 1970 and the current reporting year using the methodology required by 40 CFR Part 98 Subpart

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
					TT. Data cover the solid waste landfills at the two largest Eastman sites. Other sites and waste treatment options are excluded. CO2e emissions from the incinerator and wastewater treatment operations are not subject to reporting under the rule, emissions from over 50% of the annual volume of waste disposed in the solid waste landfill are not subject to reporting, and the emissions from the hazardous waste landfill also are not subject to the reporting. Eastman reports GHG emissions under the Mandatory Reporting of Greenhouse Gases required reporting of emissions above appropriate thresholds for fossil fuel and industrial gas suppliers, direct GHG emitters and manufactures of heavy-duty and off-road vehicles. The stated intent of the legislation was to provide data that would allow apples-to-apples comparisons of sources of GHG emissions to aid in the development of policy, legislation and/or regulation of these emissions. Numerous sources of GHG were not included in the rule because they were evaluated to be below appropriate thresholds. Data reported

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
					herein are primary data but with significant exclusions. GHG emissions from processing waste represent <5% of reported Eastman Scope 1, 2 and 3 emissions.
Business travel	Not relevant, calculated	7800	Employee commercial air travel is collected by Eastman's travel administrator. The emissions calculation is a product of the mileage of a segment (trip) multiplied by an 'emissions factor'. The mileage of each trip segment is maintained in our database for all flights. The emission factors are set by DEFRA which is The United Kingdom's "Department for Environment, Food, & Rural Affairs". Additional information about the formulation and accounting methodology around these emissions factors can be found on the DEFRA's website located at: http://www.ukconversionfactorscarbonsmart.co.uk/	100.00%	
Employee commuting	Not relevant, calculated	15971	Employee commuting GHG emission estimates were calculated assuming US-average commuting statistics for all Eastman employees in North America and European average statistics for all other employees regardless of location. Eastman 2015 human resource employee data was used to identify the number of Eastman employees at the end of 2015. The 2009 National Household Travel Survey [1] was used to identify typical distance for commuting in the US. Because of the location of Eastman sites in North America, it was assumed that all North American employees commute using personal vehicles (automobiles, trucks, vans or SUVs) as opposed to public transportation. The same average round trip commuting distances used for the US were used for the		Primary data were used to identify the number of Eastman employees at the end of 2015. Secondary data were used to determine commuting modes and to estimate distances and CO2eq emission factors per person-km Modest increase partially due to increase in number of employees; other increases probably due to methodological refinement this year.

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
			EU. European commuting patterns were estimated using the Statistical Pocketbook averages for EU-28. The GHG protocol “Calculating CO2 Emissions from Mobile Sources” document was used to determine the GHG emission factor for commute via passenger car or rail. http://www.ghgprotocol.org/files/ghgp/tools/co2-mobile.pdf [1] “Summary of Travel Trends: 2009 National Household Travel Survey.” US Department of Transportation, A. Santos, N. McGuckin, H.Y. Nakamoto, D. Gray, and S. Liss. http://nhts.ornl.gov/2009/pub/stt.pdf [2] "EU Transport in Figures: Statistical Pocketbook 2015." European Commission 2015. http://ec.europa.eu/transport/facts-fundings/statistics/pocketbook-2015_en.htm		
Upstream leased assets	Not relevant, explanation provided				Eastman has very few upstream leased assets, and emissions are extremely small in comparison to overall corporate evaluation and measurement.
Downstream transportation and distribution	Not relevant, explanation provided				As noted transportation carbon emissions based on distribution is less than one percent of total emissions. This constitutes a very small percentage of the overall product impact and is also relatable to downstream transportation distribution.
Processing of sold products	Relevant, not yet calculated				

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
Use of sold products	Relevant, not yet calculated				
End of life treatment of sold products	Relevant, not yet calculated				
Downstream leased assets	Not relevant, explanation provided				Eastman has very few downstream assets, such as warehouse space, and emissions are too small for measurement.
Franchises	Not relevant, explanation provided				Eastman has no franchise businesses or assets.
Investments	Not evaluated				
Other (upstream)	Not evaluated				
Other (downstream)	Not evaluated				

CC14.2

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

No third party verification or assurance

CC14.2a

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 (%)

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
Employee commuting	Acquisitions	2.1	Increase	Eastman had more employees in 2015 than in 2014.

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Fuel- and energy-related activities (not included in Scopes 1 or 2)	Other: Process improvement	5.2	Decrease	Improvements in grid mix and energy efficiency
Business travel	Acquisitions	13	Increase	Increased global presence likely required more business travel outside the US
Purchased goods & services	Change in methodology	18	Decrease	The number in 2014 was misreported as being too high due to the fact that some scope 2 emissions were included.

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 engagement and measures of success

Eastman engages with suppliers on sustainability through meetings, events and projects. Key suppliers are rated by Eastman and one key metric is sustainability. Procurement reviews the ratings with the suppliers, and Eastman gives supplier awards for sustainability. Eastman also engages customers by working with them to develop transportation and manufacturing efficiency models. These models have provided Eastman and customers an enhanced understanding of the economic and environmental effects of customers' raw material sourcing strategies. The models also predicted carbon emissions associated with transportation, storage and manufacturing practices. Priority has been given to customers most interested in reducing their impacts. Once the work of these priority customers was completed, Eastman analyzed the results enabling other customers to also be assisted. Eastman strategically targets businesses that can produce different forms, grades or types of products to fit the same customer need. Additionally, Eastman has also developed tools for the supply chain to optimize the methods of transportation for raw materials and products.
As a member of the American Chemistry Council, Eastman Chemical Company encourages and supports logistics providers in becoming Responsible Care® Partners. For more than 20 years, Responsible Care® Partners have worked hand-in-hand with American Chemistry Council members to promote continual environmental, health, safety and security (EHS&S) performance improvements throughout the chemical industry supply chain. Eastman Chemical Company is

striving to collaborate with suppliers through strategic relationships, Voice of Supplier (VOS) surveys and innovation discussions to surface and vet sustainable solutions for logistical needs. The Integrated Global Supply Chain (IGSC) at Eastman Chemical Company collaborates with logistics providers to actively look for solutions that can improve the overall carbon footprint. Eastman suppliers are encouraged to implement sustainable solutions, such as upgrading to new trucks and maximizing the mpg realized over mountainous terrain. Many of Eastman Chemical Company's logistics suppliers and customers are members of SmartWay®, which encourages fuel savings and reduced emissions through a variety of sustainable strategies, such as wind deflectors, idle reduction equipment and speed control.

Eastman Chemical Company's IGSC recently conducted the first VOS survey targeted at the core logistics supplier base. The purpose of the survey was to learn how Eastman can become a shipper of choice. The survey provided insight into what the IGSC as an organization is doing well and where it needs to improve. Along with the VOS results, the IGSC has also formalized a program to solicit innovative ideas from suppliers. These ideas include safety, sustainability/carbon footprint improvements, improvements to logistical capabilities, enable cost reductions, potential sales generation, process improvement, new product applications, and improved communications/supplier relationships. The innovative ideas are used to drive strategic value and sustainable solutions for both Eastman Chemical Company and Eastman logistics providers, which ultimately reflects additional overall value chain success.

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

Number of suppliers	% of total spend (direct and indirect)	Comment

CC14.4c

If you have data on your suppliers' GHG emissions and climate change strategies, please explain how you make use of that data

How you make use of the data	Please give details
Other	We interact with suppliers on numerous sustainability related topics, but data is not collected on supplier's GHG emissions.

CC14.4d

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
David Saulsbury	Director, Global HSES Strategy and Security	Other: Director, Global HSES Strategy and Security

Further Information

CDP 2016 Climate Change 2016 Information Request