

Module: Introduction**Page: Introduction**

CC0.1**Introduction**

Please give a general description and introduction to your organization.

Layne Christensen Company (“Layne”) is a global water management, construction and drilling company. Layne provides responsible solutions for water, mineral and energy. This integrated approach allows Layne to offer more than individual services, it ensures streamlined communications, expedited timelines, and a constant focus on its overriding values of safety, sustainability, integrity and excellence. Layne’s solutions enhance the lives of people by providing and protecting the world’s essential resources. Layne’s customers include government agencies, investor-owned utilities, industrial companies, global mining companies, consulting engineering firms, heavy civil construction contractors, oil and gas companies, power companies and agribusiness. We also have a renewable energy group, which provides non-combustion waste-to-power solutions.

We operate on a geographically dispersed basis, with approximately 70 sales and operations offices located throughout North America, Africa, Australia, South America, and through our affiliates in Latin America countries. Headquartered in The Woodlands, Texas, Layne Christensen has approximately 3,000 full-time employees. For additional information, please refer to our fiscal year 2015 Sustainability Report and our corporate website.

FISCAL YEAR: Please note that Layne’s fiscal year ends on January 31st. Our reporting period is Layne’s fiscal year 2015, which ended on January 31, 2015.

PRIOR FISCAL YEAR RESTATEMENT: We have restated our fiscal year 2013 and 2014 emissions upon further review and refinement of our data management procedures. Our restated fiscal year 2013 emission serve as our base year.

Forward-Looking Statements: This publication may contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Exchange Act of 1934. Such statements may include, but are not limited to, statements of plans and objectives, statements of future economic performance and statements of assumptions underlying such statements, and statements of management’s intentions, hopes, beliefs, expectations or predictions of the future. Forward-looking statements can often be identified by the use of forward-looking terminology, such as “should,” “intended,” “continue,” “believe,” “may,” “hope,” “anticipate,” “goal,” “forecast,” “plan,” “estimate” and similar words or phrases. Such statements are based on current expectations and are subject to certain risks, uncertainties and assumptions, including but not limited to: prevailing prices for various commodities (including gold, copper, crude oil and natural gas), the duration of the current slowdown in the mineral drilling services market, unanticipated slowdowns in Layne’s major markets, the availability of credit, the risks and uncertainties normally incident to the construction industry, the timing for the completion of the existing unprofitable contracts in Heavy Civil, the ability to

successfully obtain profitable contracts in Energy Services, the impact of competition, the effectiveness of operational changes expected to increase efficiency and productivity and reduce costs, worldwide economic and political conditions and foreign currency fluctuations that may affect worldwide results of operations. Many of the factors that will determine these items are beyond Layne's ability to control or predict. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially and adversely from those anticipated, estimated or projected. These forward-looking statements are made as of the date of this filing, and Layne assumes no obligation to update such forward-looking statements or to update the reasons why actual results could differ materially from those anticipated in such forward-looking statements.

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

Sat 01 Feb 2014 - Sat 31 Jan 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?

Senior Manager/Officer

CC1.1a

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

The highest level of direct responsibility within Layne resides with our Senior Human Resources Manager, Troy Hantla. Mr. Hantla oversees our sustainability performance and annual sustainability reporting.

CC1.2

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

No

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

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	Our risk assessment considers all geographical locations where we operate and have facilities. Additionally, we consider global environmental and socioeconomic trends, which may impact the value of our assets in addition to revenue and costs in our divisions: Water Resources, Energy Services, Mineral Services, Heavy Civil and Inliner.	3 to 6 years	Our Division Presidents monitor market and regulatory risks on a quarterly basis as part of their reporting to our Board. They are supported by our functional teams, which include corporate fleet and equipment managers, and each division's business development teams.

CC2.1b

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

COMPANY LEVEL:

Individuals who manage sustainability at Layne maintain strategic oversight to identify and manage company-level risks related to climate change that may impact our reputation, profitability and access to capital. With oversight from Division Presidents, physical, regulatory and market risks are managed through a series of compliance- and values-based programs and engagement with industry leaders and experts. Layne engages with more than 30 national and international associations (including the American Biogas Council, Public Works Directors Association, National Association of Water Companies, Society of Mining Engineers and the United States Business Council for Sustainable Development) not only to monitor company-wide risks, but also to explore opportunities to innovate and advance the conversation regarding climate change mitigation and adaptation within the industries we serve.

ASSET LEVEL:

Because Layne operates on a geographically dispersed basis with the majority of our operations occurring at client sites, our most critical physical assets are the equipment used to deliver our services, including drill rigs, trucks and earth moving equipment. Our Division Presidents manage teams that provide daily and strategic oversight to managing risks at the asset-level. Additionally, our front-line workforce, including project leads, field workers and contractors in the field are

tasked with identifying physical risks mainly related to weather impacts that may cause project delays or damage to equipment. We also engage with more than 30 regional oil and gas, water and mining associations in Kansas, Texas, Illinois, Iowa, Mississippi, Nebraska, Oklahoma, Wisconsin, New Jersey, Pennsylvania and New York to identify regulatory and business risks and opportunities related to our assets and key markets where we deliver services.

CC2.1c**How do you prioritize the risks and opportunities identified?**

The criteria used to determine our priorities with regards to climate change risks and opportunities include the following factors: degree of potential regulatory, physical and other business impacts to Layne. To determine the degree of each type of impact, we consider the relationship and correlations to profitability, organizational mission, reputation, business continuity and other applicable issues for our Company. We also consider both company and asset risks, and through prioritization, we seek to support our Company's ability to deliver on our purpose and vision, and create shareholder and stakeholder value.

In addition to engaging internally to prioritize risks and opportunities, we engage with and monitor the activities related to climate change risk among our key external stakeholders, which include government agencies, investor-owned utilities, industrial companies, global mining companies, consulting engineering firms, heavy civil construction contractors, oil and gas companies, power companies and agribusiness.

To identify, prioritize and capitalize on climate change-related opportunities, Layne previously defined objectives with an emphasis on (1) reducing our carbon emissions, and (2) deploying sustainable solutions for clients. Reducing our carbon emissions has been prioritized due to volatility in fuel and energy costs, potential long-term regulatory risks, increasing importance to our customers and the importance of sustainability as a core value to the Company. The deployment of sustainable solutions to our clients has been prioritized to support our growth strategy, and we believe that our Company's core competencies uniquely position us to provide services to support companies' and communities' climate change adaptation and mitigation efforts.

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. INFLUENCE ON BUSINESS STRATEGY**

Sustainability is one of four core values at Layne, alongside safety, integrity and excellence, and is explicitly embedded in Layne's corporate vision – to be the leading sustainable solutions provider to the world of essential natural resources: water, minerals and energy. Our climate, energy and sustainability strategy is also integrated into Layne's growth strategy, which is to coordinate and market our product and service offerings into effective solutions and build attractive extensions of our current divisions driven by our core competencies.

We operate as an integrated, global water management, construction and drilling company, collaborating across all operating segments, functional and geographic lines to deliver total solutions for some of the world's toughest water, mineral and energy challenges. This integrated approach ensures a constant focus on sustainability and allows us to offer more than the sum of our individual services.

Internal and external communications are critical components that inform our climate, energy and sustainability strategy. Reporting on our strategy and progress annually to investors and other important stakeholders through our CDP Climate Change and Water responses, and our Sustainability Report (using the GRI framework), provides an additional layer of accountability and the opportunity for reflection on continued improvements that we can make.

II. ASPECTS IMPACTING STRATEGY

Our assessment of our greatest climate-related risks and opportunities has informed our strategy, which is focused on (1) reducing carbon emissions; (2) delivering sustainable solutions that address the nexus between energy, water and waste; and (3) better serving the needs of our investors, customers, employees and communities through a disciplined, holistic and triple-bottom line approach to sustainability.

III. SHORT-TERM STRATEGY

Climate change has influenced Layne's short-term strategy (1-3 years) by emphasizing opportunities through our sustainable solutions. Layne will continue to evolve our sustainability goals to align with our business and financial priorities in the short term.

IV. LONG-TERM STRATEGY

Climate change has influenced Layne's long-term strategy (4-10 years) in the following ways: (1) Sustainability is a core value at Layne, and (2) Sustainability is central to, and explicit within, Layne's long-term vision.

The decision to prioritize sustainability is a reflection of our assessment of the tremendous opportunities that a proactive response to climate change risks can bring

to the top-line, bottom-line and overall value of our organization. Over the next five years, we plan to focus on energy, water and waste as key components of Layne's strategy for sustainability in both operations and client services. A key component of our long-term strategy is to help the energy sector address the water challenges they face while expanding the availability of lower carbon fuels and progressive alternative energy solutions.

We know that the vast majority of our emissions and costs associated with energy are derived from our use of fuel on job sites, and as such, reducing our fuel impacts is one of Layne's greatest long-term opportunities.

V. STRATEGIC ADVANTAGE

Although we consider ourselves to still be in the early stages of implementing our sustainability strategy, we have articulated a vision and established a measured performance plan to achieve the following advantages: (1) providing industry leadership and sustainable value to our clients and investors, (2) strengthening and engaging our workforce, and (3) fostering innovative processes, technologies and behaviors that will increase operating and capital efficiency, and support continued revenue growth.

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?

No, and we currently don't anticipate doing so in the next 2 years

CC2.2d

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

Trade associations

CC2.3a

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

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
----------------------	--------------------	-----------------------	-------------------------------

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

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?
-------------------	--	---	---

CC2.3d

Do you publicly disclose a list of all the research organizations that you fund?

CC2.3e

Do you fund any research organizations to produce or disseminate public work on climate change?

CC2.3f

Please describe the work and how it aligns with your own strategy on climate change

CC2.3g

Please provide details of the other engagement activities that you undertake

CC2.3h

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?

We currently engage on climate change policy primarily on an indirect basis through memberships in leading trade associations for the industries we serve. Examples include the American Biogas Council and the American Water Works Association. Through memberships, we are able to monitor whether an association's activities are consistent with our climate, energy and sustainability strategy. Prior to entering into new affiliations or expanding the scope of current affiliations, an organization's policy positions are among the several factors that we consider.

Additional information on the American Biogas Council's policy positions can be found at: http://www.americanbiogascouncil.org/legislative_lra.asp. Additional information on the American Water Works Association's policy positions can be found at: <http://www.awwa.org/legislation-regulation.aspx>.

CC2.3i

Please explain why you do not engage with policy makers

CC2.4

Would your organization's board of directors support an international agreement between governments on climate change, which seeks to limit global temperature rise to under two degree Celsius from pre-industrial levels in line with IPCC scenarios such as RCP2.6?

No opinion

CC2.4a

Please describe your board's position on what an effective agreement would mean for your organization and activities that you are undertaking to help deliver this agreement at the 2015 United Nations Climate Change Conference in Paris (COP 21)

Further Information

Page: CC3. Targets and Initiatives

CC3.1

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

No

CC3.1a

Please provide details of your absolute target

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions (metric tonnes CO2e)	Target year	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	Target year	Comment
----	-------	-------------------------	----------------------------	--------	-----------	--------------------------------	-------------	---------

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
----	---	--	---	--	---------

CC3.1d

For all of your targets, please provide details on the progress made in the reporting year

ID	% complete (time)	% complete (emissions)	Comment
----	-------------------	------------------------	---------

CC3.1e

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

Prior to establishing a public, long-term target, we are focused on implementing procedures and information technology infrastructure to create stronger baselines from which we can track our progress and achieve meaningful future reductions.

We forecast that our Scope 1 and 2 emissions intensity per revenue and employee will likely decrease over the next five years as we begin to target our large emission sources (notably diesel and gasoline use), and prioritize behavioral change and other emissions reduction opportunities. Changes in absolute emissions will be driven by our growth plans and the nature of our services, and may increase if our revenue growth and employee count outpace our annual reductions.

CC3.2

Does the use of your goods and/or services directly enable GHG emissions to be avoided by a third party?

Yes

CC3.2a

Please provide details of how the use of your goods and/or services directly enable GHG emissions to be avoided by a third party

SCOPE OF EMISSIONS: Scope 1 and 2 emissions

HOW EMISSIONS ARE AVOIDED BY THIRD PARTIES: Layne Christensen provides a variety of products and services that directly enable our customers, particularly municipalities and industrial customers, to reduce their greenhouse gas emissions.

Layne's Energy Services Division provides options for a clean energy future by expanding access to lower carbon fuels and alternative energy solutions. We also offer a wide range of design and construction solutions for pipelines, pad sites, treatment facilities, and impoundments for the oil and gas industry. Layne's Energy Services Division performs field and lab testing services, water treatment, testing and flowback services, as well as filtration and evaporation systems, to address the industry's varied water needs. In many cases, the Layne ALLclear™ wastewater solution minimizes the need to transport wastewater from hydraulic fracturing offsite for treatment, a solution that reduces energy usage, local infrastructure impact and carbon emissions.

Layne's Heavy Civil Division has a dedicated Renewable Energy Group that develops non-combustion waste-to-energy projects for customers. Additionally, Layne's Water Resources Division provides services, such as our well rehabilitations and wastewater treatment systems, which improve the efficiency of our customers' infrastructure and processes. These services reduce the energy consumption required and extend the life of existing infrastructure, thereby reducing greenhouse gas emissions. Our Water Resources Division also provides carbon sequestration wells to reduce third party emissions.

Layne will continue to evaluate and implement sustainable solutions for our customers that enable them to avoid GHG emissions.

ESTIMATE OF EMISSIONS AVOIDED: In fiscal year 2015, we did not track emissions avoided company-wide.

Methodology, assumptions, emission factors and global warming potentials: In fiscal year 2015, we did not track these metrics company-wide.

CERs and ERUs: We have no current plans to generate Certified Emissions Reductions (CERs) and Emissions Reduction Units (ERUs) within the UN Framework Convention on Climate Change (UNFCCC)'s Clean Development Mechanisms (CDMs) or Joint-Implementation (JI) programs. We will continue to monitor these opportunities and their applicability to our company and its global operations.

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		
To be implemented*		
Implementation commenced*		
Implemented*	14	1091
Not to be implemented		

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
Low carbon energy purchase	In the first six months of fiscal year 2015, we carried over renewable energy credits (RECs) that we purchased in fiscal year 2014. These credits represent 752,000 kilowatt-hours at our corporate headquarters in The Woodlands, Texas.	404	Scope 2	Voluntary	0	1800	>25 years	1-2 years	

CC3.3c

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

Method	Comment
Compliance with regulatory requirements/standards	The delivery of our products and services requires compliance with regulatory requirements and standards. Often these requirements and standards are built into our bidding process with potential customers. As such, compliance is a method used to drive investment in emissions reduction activities.
Financial optimization calculations	We engage in financial optimization calculations prior to making investments in emissions reduction activities. We consider cost-benefit analysis, feasibility for operations and assess unintended consequences. We also explore the potential for incentives and apply for grants where opportunities to subsidize some costs are possible. These calculations influence decisions on how to best expand pilot projects, such as our use of electric rigs and solar panels for metering.

Method	Comment
Employee engagement	Our policies, such as the “no idling” policy, and investments, such as those in motion sensors and programmable thermostats, are designed to create a culture of awareness of environmental impacts and costs among all employees. Employee engagement will likely influence further investment decisions and strategy to increase environmental stewardship at Layne Christensen.

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
In mainstream financial reports but have not used the CDSB Framework	Complete	p.1,4,9,10,26	https://www.cdp.net/sites/2015/17/35217/Climate Change 2015/Shared Documents/Attachments/CC4.1/2015 10-K.pdf
In voluntary communications	Complete	p.6,11-12	

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
Fuel/energy taxes and regulations	Our fleet contains diesel, propane and gasoline vehicles in addition to our drilling, pumping and testing equipment. Additional taxes and regulations related to our fleet and	Increased operational cost	1 to 3 years	Direct	More likely than not	Low-medium	Increase in annual energy spend associated with regulations	Our fleet managers work closely with truck and equipment dealers and manufacturers, often communicating on a daily basis, to proactively mitigate regulatory risks related to fuel. In FY15, we continued	The primary costs associated with managing this risk currently are investments in reducing our emissions. While there are not variable costs, there are labor costs currently

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	equipment would increase our operating costs and may facilitate the need to convert specific vehicles and equipment.							our new vehicle accounting system to ensure that each division has the right vehicle for the right job. The accounting system will enable more accurate data on each vehicle so we can properly maintain them and lower fuel consumption and insurance costs.	associated with our fleet managers' time to manage this risk.
Emission reporting obligations	Our global customers, which include municipalities and industrial customers, will likely face a variety of emissions reporting obligations in the coming years. As our services constitute their indirect emissions, we will likely need to provide support to customers with emissions	Reduced demand for goods/services	3 to 6 years	Indirect (Client)	More likely than not	Low-medium	Decrease in revenue should demand for goods and services be adversely impacted by emissions reporting obligations	We have been engaged in a significant, multi-year effort to develop credible baselines for our Scope 1 and 2 greenhouse gas emissions. We have created a data entry procedure where our Accounts Payable staff enters fuel, electricity and natural gas consumption data in our Enterprise Resource Planning software system real-time as	The primary costs associated with managing this risk currently are investments in reducing our emissions. While there are not variable costs, there are labor costs currently associated with our employees' time to manage this risk.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	reporting obligations.							transactions are accounted for. We have also partnered with our fuel card vendor to receive custom reports that provide consumption data by fuel type to support the ongoing tracking and monitoring of our greenhouse gas emissions.	
Air pollution limits	Layne's fleet and equipment are subject to emissions standards from regulatory bodies in the United States, California and other markets where we operate. Additionally, our clients are often subject to air pollution limits from federal and state agencies.	Increased capital cost	1 to 3 years	Direct	More likely than not	Unknown	Increase in the number of our engines and vehicles requiring replacements due to air pollution limits should additional regulations be enacted	Layne Christensen manages this risk by continuously monitoring regulatory developments in the markets in which we operate, in addition to identifying ways to reduce our exposure to regulatory risks through our fleet management and sustainability programs. Our fleet managers closely monitor U.S. Department of Transportation regulations to inform	The primary costs associated with managing this risk currently are investments in reducing our emissions. While there are not variable costs, there are labor costs currently associated with our employees' time to manage this risk.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								capital expenditures and procedural modifications, and train our employees in the field on Department of Transportation compliance. At job sites, we continue to promote our no idling policy. Additionally, we continue to invest in Tier 4 engines when purchasing new trucks to proactively manage potential regulatory risks.	

CC5.1b

Please describe your inherent risks that are driven by change 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 temperature extremes	Changes in temperature extremes, both cold and hot,	Reduction/disruption in production capacity	1 to 3 years	Direct	Unknown	Unknown	Decrease in revenue due to project delays and	We manage this risk through project planning to reduce or	The primary costs associated with mitigating these

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>have the ability to delay production schedules. For example, colder weather requires that we take action to preserve equipment, water tanks and water lines to avoid schedule delays.</p>						<p>disruptions</p>	<p>minimize delays and disruptions. We also have a series of policies and procedures, including preventive maintenance, to protect our physical assets from changes in temperature extremes. Our Executive Leadership Team, which includes our Division Presidents, also considers this risk, among numerous other factors, in strategic planning. As a construction company, we are able to adjust our geographical focus areas and increase capital expenditures as needed. Should this risk become more prevalent, we have the opportunity to leverage our internal experience and</p>	<p>physical risks, such as insurance, are currently variable. While not variable, there are associated labor costs across divisional and corporate functions.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								capabilities to mitigate risks to our facilities and equipment.	
Change in precipitation extremes and droughts	Changes in precipitation patterns have the ability to delay production schedules. For example, we experienced extended periods of rainy weather in most of the United States during the reporting period.	Reduction/disruption in production capacity	1 to 3 years	Direct	Unknown	Unknown	Decrease in revenue due to project delays and disruptions	Consistent with how we manage all physical risks, we consider extreme changes in precipitation in strategic planning when pursuing markets and in project planning to reduce or minimize delays and disruptions. As part of our safety and fleet management procedures, we also work to protect our people from injuries and physical assets from damages resulting from precipitation extremes. Additionally, we maintain multiple sourcing options for critical procurement items sourced from regions that	The primary costs associated with mitigating these physical risks, such as insurance, are currently variable. While not variable, there are also associated labor costs across divisional and corporate functions.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								are vulnerable to droughts.	
Snow and ice	High levels of snow and ice have the ability to delay production schedules and can necessitate maintenance and/or repair to our physical assets.	Reduction/disruption in production capacity	1 to 3 years	Direct	Unknown	Unknown	Decrease in revenue due to project delays and disruptions	Consistent with how we manage all physical risks, we consider snow and ice in strategic planning when pursuing markets and in project planning to reduce or minimize delays and disruptions. As part of our safety and fleet management procedures, we also work to protect our people from injuries and physical assets from damages resulting from precipitation extremes.	The primary costs associated with mitigating these physical risks, such as insurance, are currently variable. While not variable, there are also associated labor costs across divisional and corporate functions.
Sea level rise	Dramatic rises in sea levels may impact our ability to work in coastal areas, although coastal areas are not a significant part of our	Reduction/disruption in production capacity	>6 years	Direct	Unknown	Unknown	Decrease in revenue due to project delays and disruptions, and broader socio-economic impacts	Diversification of projects across markets and geographical locations is an important method by which we manage risks related to potential sea level rises.	The primary costs associated with mitigating these physical risks, such as insurance, are currently variable. While not variable,

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	business.							Through our overarching and climate change adaptation and mitigation strategies, we also strive to reduce some of our exposure to this risk.	there are also associated labor costs across divisional and corporate functions.
Tropical cyclones (hurricanes and typhoons)	The prevalence of extreme hurricane events in the United States has the ability to delay production schedules and cause damage to physical assets.	Reduction/disruption in production capacity	1 to 3 years	Direct	Unknown	Unknown	Decrease in revenue due to project delays and disruptions	We have disaster recovery plans in place to protect our data and information technology assets. Additionally, we utilize back-up diesel generators and obtain insurance to protect our assets. Also, consistent with how we manage all physical risks, we consider hurricane and typhoon risks in strategic planning when pursuing markets and in project planning. Additionally, we maintain multiple	The primary costs associated with mitigating these physical risks, such as insurance, are currently variable. While not variable, there are also associated labor costs across divisional and corporate functions.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								sourcing options for critical procurement items sourced from regions that are vulnerable to hurricanes and typhoons.	
Induced changes in natural resources	Induced changes in natural resources related to physical risks associated with climate change may impact our ability to procure materials for project delivery. Additionally, such changes may impact our workers as well.	Reduction/disruption in production capacity	>6 years	Indirect (Supply chain)	Unknown	Unknown	Decrease in revenue due to project delays and disruptions, and broader socio-economic impacts	Diversification of projects across markets and maintaining multiple sources for procurement is an important method by which we manage risks related to induced changes in natural resources. We continue to update our disaster recovery and business continuity plans.	The primary costs associated with mitigating these physical risks, such as insurance, are currently variable. While not variable, there are also associated labor costs across divisional and corporate functions.

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
Reputation	Corporate reputation on performance related to environmental responsibility, particularly on issues related to climate change, is increasingly important to our customers. Our company provides services to municipalities and industrial customers, many of whom will be increasingly considering suppliers' reputation related to climate change and sustainability in their decision-making and vendor selections. Also, reputation on performance related to climate change issues is increasingly important to our employees, investors and other stakeholders.	Reduced demand for goods/services	1 to 3 years	Direct	Unknown	High	Decrease in revenue should we experience adverse impacts associated with our reputation on climate change management	We manage our reputation through our commitment to sustainability as one of four core values at Layne and through the work of individuals who oversee our sustainability performance and reporting. We are managing these risks through ongoing tracking on our energy consumption and encourage behavioral changes at our facilities and on our job-sites to reduce greenhouse gas emissions. We also actively engage our customers and investors on sustainability, and communicate and report on our sustainability performance, solutions and strategy through the CDP Climate Change and Water Information	The primary costs associated with managing this risk currently include those related to our investments in emissions reduction activities and our employees' time.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								Request and Sustainability Reports using the GRI reporting framework.	
Uncertainty in market signals	Negative socio-economic conditions associated with extreme weather events and other climate change risks may present wider social disadvantages that could impact our company. In the near term, the potential for increases in costs for fuel, energy and commodities is the most immediate risk.	Increased operational cost	1 to 3 years	Direct	More likely than not	Unknown	Increase in annual energy spend	We manage risks associated with uncertainty in market signals primarily through our emphasis on fuel efficiency, which is managed by our fleet managers and other operations individuals.	Costs associated with managing market signal uncertainty are variable, most of which are embedded within our compensation for corporate and divisional management functions.
Fluctuating socio-economic conditions	A significant portion of our earnings is generated from our operations and those of our affiliates in foreign countries. Political, economic and social risks in those countries related to climate	Wider social disadvantages	>6 years	Direct	Unknown	Unknown	Decrease in revenue due to fluctuating socio-economic conditions	We manage socioeconomic risks by monitoring associated variables within countries of current or planned operations, such as commodity prices, growth in the economies of developing	Costs associated with managing socioeconomic risks are variable, most of which are embedded within our compensation for corporate and divisional

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	change could reduce or eliminate the earnings we derive from those operations. Additionally, fluctuating socio-economic conditions in the United States related to climate change have the ability to impact our company. For example, socio-economic conditions related to climate change in the United States could impact our customers' ability to access capital for our services.							countries, international political conditions, inflation, foreign exchange levels, and the ability for customers to access or generate sufficient funds to finance capital expenditures for their activities. As a construction company, we also consider potential and/or actual socioeconomic risk when deciding which international project opportunities to pursue or not pursue.	management functions.

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
General environmental regulations, including planning	Stricter environmental regulations can often increase demand for our products and services. For example, increasingly stringent water quality regulations being adopted by a variety of governing agencies has increased demand for our water treatment products and services.	Increased demand for existing products/services	1 to 3 years	Direct	More likely than not	High	Increase in revenue due to increased demand for services that help clients comply with environmental regulations	To manage this opportunity, we proactively monitor changing regulatory requirements and continue to align our product and services offerings to meet the needs of our customers. We utilize an integrated approach to customer satisfaction that enables our company to deploy sustainability products and services that meet the needs of our customers, which include government agencies, investor-owned utilities,	The costs associated with these regulatory opportunities include management time, business development costs and capital expenditures, when necessary. In fiscal year 2015, overall costs were variable and often embedded within existing compensation structures to management and business development teams. As additional regulatory opportunities present themselves, associated costs to capitalize on

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								industrial companies, global mining companies, consulting engineering firms, heavy civil construction contractors, oil and gas companies, power companies and agribusiness.	these opportunities may increase.
Renewable energy regulation	Renewable energy regulations may increase demand within our Heavy Civil Division. Our Heavy Civil Division designs and constructs biogas facilities (anaerobic digesters) for the purpose of generating and capturing methane gas from waste, an	Increased demand for existing products/services	1 to 3 years	Direct	More likely than not	High	Increase in revenue driven by increased demand for anaerobic biogas digesters	The Renewable Energy Group within our Heavy Civil Division is tasked with managing this opportunity, and primary management methods include business development, industry engagement and the establishment of strategic	Within our Heavy Civil Division, we have a dedicated, full-time staff member in the Renewable Energy Group that is focused on monitoring regulations to identify and capitalize on potential business opportunities.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	emerging renewable energy resource.							partnerships.	
Emission reporting obligations	If Layne has better emissions performance and reporting compared to competitors, a competitive advantage may be created when Layne is bidding on projects where clients have emissions reporting obligations.	Increased demand for existing products/services	3 to 6 years	Direct	More likely than not	Unknown	Increase in revenue due to delivering sustainable solutions that reduce customer emissions	We created a robust data entry procedure to support the ongoing tracking and monitoring of our greenhouse gas emissions.	The primary costs associated with managing this opportunity currently are investments in reducing our emissions. While are not variable costs, there are labor costs currently associated with our employees' time to manage this opportunity.

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 precipitation extremes and droughts	Changes in precipitation extremes and droughts may increase demand for products and services in our Heavy Civil, Water Resources and Inliner divisions. Collectively, these divisions provide water infrastructure services that provide, protect and repair water supply systems in the event of droughts. The Layne Hydro Group within the Water Resources Division also provides drought and water supply planning services to clients.	Increased demand for existing products/services	1 to 3 years	Direct	More likely than not	High	Increase revenue due to higher demand for services that respond to and mitigate risks related to droughts	To manage this opportunity, we have set forth a clear vision of our Company, which is to be the leading sustainable solutions provider to the world of the following essential natural resources: water, minerals and energy. As such, sustainability has been prioritized as one of four core values, and the deployment of sustainable solutions has been prioritized as one of Layne's greatest opportunities as an organization.	Costs associated with this opportunity include management time, business development costs and capital expenditures, when necessary. In fiscal year 2015, costs were variable and often embedded within existing compensation structures to management and employees in the field. As additional methods to manage this opportunity present themselves, associated costs to capitalize on these opportunities may increase.
Change in temperature extremes	Changes in temperature extremes may increase demand for products and	Increased demand for existing products/services	1 to 3 years	Direct	Unknown	Low-medium	Increase in revenue resulting from higher demand for	Consistent with how we manage all business opportunities associated with	Costs associated with this opportunity include management

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	services in our Heavy Civil division. Our Heavy Civil Division serves government agencies and industrial clients in design-build and construction services for water and wastewater infrastructure. This division also builds Radial Collector Wells, surface water intakes, pumping stations, dams, reservoirs and hard rock tunnels, and offers marine construction services.						services in our Heavy Civil division	addressing challenges driven by changes in physical climate parameters, we have set forth a vision to be the leading sustainable solutions provider of essential natural resources globally, and established sustainability as a core value.	time, business development costs and capital expenditures, when necessary. In fiscal year 2015, costs were variable and often embedded within existing compensation structures to management and employees in the field. As additional methods to manage this opportunity present themselves, associated costs to capitalize on these opportunities may increase.
Induced changes in natural resources	Induced changes in natural resources may increase demand for products and services in our Mineral Services Division. One of the world's largest providers	Increased demand for existing products/services	1 to 3 years	Direct	Unknown	Low-medium	Increase in revenue resulting from higher demand for services in our Mineral Services Division	Our Mineral Services division helps clients determine the economic and environmental viability of mining a site, as well as the geological properties	Costs associated with this opportunity include management time, business development costs and capital expenditures, when necessary.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	of drilling services for the mineral services industry, Layne's Mineral Services Division helps clients identify, define and develop underground base and precious mineral deposits. Services include core drilling, reverse circulation, dual tube, hammer and rotary air-blast methods.							essential to mine planning.	In fiscal year 2015, costs were variable and often embedded within existing compensation structures to management and employees in the field. As additional methods to manage this opportunity present themselves, associated costs to capitalize on these opportunities may increase.
Other physical climate opportunities	Hurricanes and other extreme weather events may increase demand for products and services in our Heavy Civil and Water Resources divisions. Collectively, these divisions provide water infrastructure	Increased demand for existing products/services	>6 years	Direct	Unknown	High	Increase in revenue due to higher demand for services that respond to, and mitigate, risks related to hurricanes, typhoons and rises in sea levels	Consistent with how we manage all business opportunities associated with addressing challenges driven by changes in physical climate parameters, we have set forth a vision to be the leading sustainable solutions provider	Costs associated with this opportunity include management time, business development costs and capital expenditures, when necessary. In fiscal year 2015, costs were variable and often embedded within existing

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	services that provide, protect and repair water supply systems in the event of hurricanes and typhoons.							of essential natural resources globally, and established sustainability as a core value. Our Executive Leadership Team, which includes our Division Presidents, also considers this opportunity, among numerous other factors, to support strategic planning.	compensation structures to management and employees in the field. As additional methods to manage this opportunity present themselves, associated costs to capitalize on these opportunities may increase.

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
Reputation	As a sustainable solutions provider, Layne also has the opportunity to attract financial	Increased demand for existing products/services	1 to 3 years	Direct	More likely than not	High	Increase in revenue resulting from our sustainable	We manage this opportunity through our commitment to sustainability as	Costs associated with managing this opportunity include

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	capital and improve its candidacy for funds in which managers screen companies based on their ability to respond to global water and energy challenges, and on the quality of their environmental, social and governance (ESG) mechanisms. Additionally, an increasing number of clients have requested information on sustainability during the prequalification process.						solutions	one of four core values at Layne and through the work of individuals who oversee our sustainability performance and reporting. We also actively engage our customers and investors on sustainability, and communicate our sustainability performance, solutions and strategy through the CDP Climate Change and Water Information Requests, as well as Sustainability Reports using the GRI reporting framework.	management time, investments in Layne's sustainability program and emissions reduction activities, and other capital expenditures when necessary. We also engage external consultants to assist in our sustainability efforts.
Changing consumer behaviour	We believe that changing customer behavior will lead to increased demand for our products and services, which	Increased demand for existing products/services	1 to 3 years	Direct	More likely than not	Medium	Increase in revenue resulting from differentiating the Company as a leader in delivering sustainable	We manage opportunities related to changing consumer behavior through stakeholder engagement with	Costs associated with managing this opportunity include management time, investments in

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	enables customers to reduce carbon emissions, particularly those related to water and natural gas. We also expect increased demand within our Mineral Services Division due to growing consumer need for minerals across the globe.						solutions	customers, industry associations and industry thought leaders. We then communicate key findings to our business development and executive leadership teams. To support our vision of being a leading provider of sustainable solutions for world's essential natural resources, Layne's Director of Global Business Development and his team identify, communicate and advance the Company's deployment of sustainable solutions.	Layne's sustainable solutions, and other capital expenditures when necessary.
Induced changes in human and cultural environments	Migration to cities, both in coastal and non-coastal areas, coupled with implementation of	Increased demand for existing products/services	1 to 3 years	Direct	More likely than not	High	Increase in revenue due to increased demand for product and services	We manage opportunities related to induced changes in human and cultural	Costs associated with managing this opportunity include the time of executives

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	adaptation strategies among our municipal and industrial customers, will likely increase demand for infrastructure services. For example, deteriorating urban infrastructure and pressure from population growth has increased demand for sewer rehabilitation.							environments through our emphasis on delivering sustainable solutions that respond to global challenges and finite resources as set forth in our corporate vision. We work across divisions to ensure that our products and services are aligned to meet the evolving needs of business and society.	and management, as well as our investments in Layne's sustainable solutions.
Increasing humanitarian demands	Our products and services are designed to respond to increasing humanitarian demands, such as providing access to water, energy and minerals, in addition to stabilizing and repairing infrastructure. According to	Increased demand for existing products/services	1 to 3 years	Direct	More likely than not	Medium	Increase in revenue due to increased demand for water services	We work across divisions to ensure that our products and services are aligned to meet the evolving needs of business and society. Our water infrastructure development and management expertise enables	Costs associated with managing this opportunity include the time of executives and management, as well as our investments in Layne's sustainable solutions.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	United Nations Water for Life, one-fifth of the world's population currently live in areas of physical water scarcity, while economic development, population growth and shifting climate patterns represent threats to limited global supply.							Layne to provide responsible solutions to a market with growing environmental, economic and sociopolitical significance.	

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	Wed 01 Feb 2012 - Thu 31 Jan 2013	59983
Scope 2	Wed 01 Feb 2012 - Thu 31 Jan 2013	3792

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
CO2	IPCC Fourth Assessment Report (AR4 - 100 year)
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)

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	lb CO2e per million BTU	EIA Technical Guidelines: Voluntary Reporting of Greenhouse Gases. January 2007 Table 1.C.5.
Diesel/Gas oil	19.07	lb CO2e per gallon	WRI Emission Factors Compilation from Cross-Sector Tools. Version 1.0. July 2009
Propane	5.71	lb CO2e per gallon	United States Environmental Protection Agency's Climate Leaders Program
Electricity	1196.58	lb CO2e per MWh	United States Environmental Protection Agency e-GRID factors: AZNM
Electricity	661.20	lb CO2e per MWh	United States Environmental Protection Agency e-GRID factors: CAMX
Electricity	1186.14	lb CO2e per MWh	United States Environmental Protection Agency e-GRID factors: ERCT
Electricity	1181.63	lb CO2e per MWh	United States Environmental Protection Agency e-GRID factors: FRCC
Electricity	1600.54	lb CO2e per MWh	United States Environmental Protection Agency e-GRID factors: MROE
Electricity	1637.82	lb CO2e per MWh	United States Environmental Protection Agency e-GRID factors: MROW
Electricity	734.29	lb CO2e per MWh	United States Environmental Protection Agency e-GRID factors: NEWE
Electricity	832.40	lb CO2e per MWh	United States Environmental Protection Agency e-GRID factors: NWPP
Electricity	1353.86	lb CO2e per MWh	United States Environmental Protection Agency e-GRID factors: NYLI
Electricity	500.35	lb CO2e per MWh	United States Environmental Protection Agency e-GRID factors: NYUP
Electricity	952.63	lb CO2e per MWh	United States Environmental Protection Agency e-GRID factors: RFCE

Fuel/Material/Energy	Emission Factor	Unit	Reference
Electricity	1668.76	lb CO2e per MWh	United States Environmental Protection Agency e-GRID factors: RFCM
Electricity	1528.76	lb CO2e per MWh	United States Environmental Protection Agency e-GRID factors: RFCW
Electricity	1833.41	lb CO2e per MWh	United States Environmental Protection Agency e-GRID factors: RMPA
Electricity	1825.15	lb CO2e per MWh	United States Environmental Protection Agency e-GRID factors: SPNO
Electricity	1606.26	lb CO2e per MWh	United States Environmental Protection Agency e-GRID factors: SPSO
Electricity	1006.12	lb CO2e per MWh	United States Environmental Protection Agency e-GRID factors: SRMV
Electricity	1759.15	lb CO2e per MWh	United States Environmental Protection Agency e-GRID factors: SRMW
Electricity	1332.59	lb CO2e per MWh	United States Environmental Protection Agency e-GRID factors: SRSO
Electricity	1364.92	lb CO2e per MWh	United States Environmental Protection Agency e-GRID factors: SRTV
Electricity	1041.73	lb CO2e per MWh	United States Environmental Protection Agency e-GRID factors: SRVC

Further Information

Page: CC8. Emissions Data - (1 Feb 2014 - 31 Jan 2015)

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

46643

CC8.3

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

2686

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?

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 Scope 2 emissions excluded from this source	Explain why the source is excluded
International facilities	Emissions excluded due to a	Emissions excluded due to a	Incomplete information for the period in question

Source	Relevance of Scope 1 emissions from this source	Relevance of Scope 2 emissions excluded from this source	Explain why the source is excluded
	recent acquisition	recent acquisition	
Non-natural gas and fuel Scope 1 emissions	Emissions are relevant but not yet calculated	Emissions are relevant but not yet calculated	Incomplete information for the period in question
Natural gas and electricity use not within 10 highest impact facilities	Emissions are relevant and calculated, but not disclosed	Emissions are relevant and calculated, but not disclosed	We track natural gas and electricity use at all of our facilities. We disclose natural gas and electricity use for our 10 highest impact facilities.

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	More than 10% but less than or equal to 20%	Assumptions Metering/ Measurement Constraints	Our natural gas usage, used to calculate Scope 1 emissions, is subject to uncertainty related to metering and measurement constraints. We extrapolated to calculate our emissions for some of our fuel consumption based on spend during the reporting year, and used assumptions based on the average price per gallon we paid for fuel in fiscal year 2015 for fuel purchasing through our credit card vendors.
Scope 2	More than 2% but less than or equal to 5%	Assumptions Metering/ Measurement Constraints	Our electricity usage, used to calculate Scope 2 emissions, is subject to uncertainty related to metering and measurement constraints, in addition to some data gaps. For some of our smaller, leased facilities where the landlord pays for utilities, we extrapolated calculations based on the nature of our operations, number of employees, weather and other factors.

CC8.6

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

No third party verification or assurance

CC8.6a

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

Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
-----------------------------------	----------------------	------------------------	-------------------	---

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 your reported Scope 2 emissions

No third party verification or assurance

CC8.7a

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

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
No additional data verified	

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 Feb 2014 - 31 Jan 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

CC9.2

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

By business division

CC9.2a

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

Business division	Scope 1 emissions (metric tonnes CO2e)
Energy Services Division	272
Geoconstruction Division	2001
Heavy Civil Division	9844
Inliner Division	9506
Mineral Services Division	13094
Water Resources Division	11821
Other	105

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)

CC9.2e

Please break down your total gross global Scope 1 emissions by legal structure

Legal structure	Scope 1 emissions (metric tonnes CO2e)

Further Information

Page: CC10. Scope 2 Emissions Breakdown - (1 Feb 2014 - 31 Jan 2015)

CC10.1

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

No

CC10.1a

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

Country/Region	Scope 2 metric tonnes CO2e	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted for in CC8.3 (MWh)
----------------	----------------------------	--	--

CC10.2

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

By business division

CC10.2a

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

Business division	Scope 2 emissions (metric tonnes CO2e)
Heavy Civil Division	162
Inliner Division	1029
Water Resources Division	543
Other (Corporate/Shared)	351

CC10.2b

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

Facility	Scope 2 emissions (metric tonnes CO2e)
----------	--

CC10.2c

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

Activity	Scope 2 emissions (metric tonnes CO2e)
----------	--

CC10.2d

Please break down your total gross global Scope 2 emissions by legal structure

Legal structure	Scope 2 emissions (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 fuel, electricity, heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year

Energy type	MWh
Fuel	214048
Electricity	4481
Heat	
Steam	
Cooling	

CC11.3

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

Fuels	MWh
Natural gas	4498
Diesel/Gas oil	168087
Other: Gasoline	37199
Propane	4264

CC11.4

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

Basis for applying a low carbon emission factor	MWh associated with low carbon electricity, heat, steam or cooling	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	Comment
Emissions reduction activities		Decrease	Our decrease in emissions in fiscal year 2015 is due in part to the relocation of our corporate headquarters to a LEED® certified building during fiscal year 2014.
Divestment		Decrease	Our decrease in emissions in fiscal year 2015 is due in part to the sale of our Tecniwell manufacturing operations in Italy and our Costa Fortuna subsidiaries in Uruguay and Brazil.
Acquisitions			Not applicable to Layne Christensen in fiscal year 2015
Mergers			Not applicable to Layne Christensen in fiscal year 2015
Change in output		Decrease	The absolute decrease in our emissions is primarily attributed to a decrease in output, particularly within our Mineral Services Division. Our Mineral Services Division consumes the most energy of all divisions to deliver services.

Reason	Emissions value (percentage)	Direction of change	Comment
Change in methodology			In fiscal year 2015, there were no changes in methodology that affected our emissions performance. Please note that we have restated our fiscal year 2013 emissions as a result of refining our boundary.
Change in boundary		Decrease	Our decrease in emissions is partially due to the recalculation of our natural gas use to reflect our ten highest impact facilities.
Change in physical operating conditions			In fiscal year 2015, we did not experience any significant changes in physical operating conditions.
Unidentified			In fiscal year 2015, the decrease in our emissions is primarily attributable to decreased output and our emissions reductions activities.
Other			

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	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
0.00006166	metric tonnes CO2e	unit total revenue	18.8	Decrease	During the reporting year, our emissions per dollar of revenue increased by 18.8% (from .00007591 to 0.00006166) primarily due to a large decrease in output from our Mineral Services Division.

CC12.3

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per full time equivalent (FTE) employee

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
15.18	metric tonnes CO2e	FTE employee	5.0	Decrease	During the reporting year, our emissions per full-time employee decreased from 15.98 to 15.19, amid a decrease in full-time employees from 4,082 to 3,248 which was outweighed by our decrease in emissions.

CC12.4

Please provide an additional intensity (normalized) metric that is appropriate to your business operations

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
	metric tonnes CO2e				

Further Information

Page: CC13. Emissions Trading

CC13.1

Do you participate in any emissions trading schemes?

No, and we do not currently anticipate doing so in the next 2 years

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
-------------	-----------------------------------	----------------------	----------------------	--	----------------------

CC13.1b

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

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, not yet calculated				Our largest purchase categories include bentonite/polymers, steel pipe, sand, paper, polyvinyl chloride, tricone bits and drill pipe components. We consider but do not calculate these emissions.
Capital goods	Relevant, not yet calculated				Our capital goods consist primarily of our fleet and equipment for drilling, pumping, testing and other processes used for the delivery of goods and services to our customers. We consider but do not calculate these emissions.
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Relevant, not yet calculated				We consider but do not calculate these emissions.
Upstream transportation and distribution	Not relevant, explanation provided				We are primarily a project-based services company and do not have distribution centers within our operations.
Waste generated in operations	Relevant, not yet calculated				We do not currently track associated emissions related to waste sent to landfill. We are currently tracking the percentage of waste recycled versus sent to landfill. For additional information on waste stewardship, please refer to the “Waste and Recycling” section of our FY15 Sustainability Report.

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
Business travel	Relevant, not yet calculated				We do not currently track associated emissions from business travel by car, plane and other modes of transportation.
Employee commuting	Relevant, not yet calculated				We do not currently track associated emissions from employee commuting using personal vehicles. During the reporting year, we had approximately 3,248 employees.
Upstream leased assets	Not relevant, explanation provided				Our leased U.S. facilities' natural gas and electricity emissions are considered when developing our boundary for ten highest impact facilities of our Scope 1 and 2 emissions.
Downstream transportation and distribution	Not relevant, explanation provided				We do not believe that we have any relevant emissions associated with investments during the reporting period as defined in the new GHG Protocols Scope 3 Standards.
Processing of sold products	Not relevant, explanation provided				We are primarily a project-based services company and do not have distribution centers within our operations.
Use of sold products	Not relevant, explanation provided				Any related emissions from processing sold products, which are not already included in our Scope 1 and 2 emissions, will vary greatly among the diverse products and services delivered within Layne Christensen.
End of life treatment of sold products	Relevant, not yet calculated				Layne's products and services delivered within our divisions often result in significant emissions once used by our customers, particularly our municipal and industrial customers.
Downstream leased assets	Relevant, not yet calculated				Much of our business is focused on creating and repairing infrastructure, which extends life and prevents unnecessary replacement or disposal. Emissions related to end of life treatment of sold products and services will vary greatly among the diverse products and services delivered within Layne Christensen.
Franchises	Not relevant, explanation provided				We do not believe that we have any relevant emissions associated with leased assets during the reporting period as defined in the new GHG Protocols Scope 3 Standards.
Investments	Not relevant, explanation				We do not believe that we have any relevant emissions associated with investments during the reporting period as defined in the new GHG

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
	provided				Protocols Scope 3 Standards.
Other (upstream)	Not relevant, explanation provided				We have not identified any other upstream Scope 3 emission sources at this time.
Other (downstream)	Not relevant, explanation provided				We have not identified any other downstream Scope 3 emission sources at this time.

CC14.2

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

No emissions data provided

CC14.2a

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

Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of 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?

No, we don't have any emissions data

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
------------------------------	-------------------	------------------------------	---------------------	---------

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

Yes, other partners in the value chain

CC14.4a

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

I. METHODS OF ENGAGEMENT

We engage with our suppliers of capital goods (e.g., fleet and equipment) to identify opportunities to leverage emerging and more energy-efficient technologies. The industries from which Layne purchases its fleet and equipment are consolidated. This enables us to develop strong relationships with a targeted group of manufacturing suppliers and their dealers. The manufacturers of capital goods are also focused on developing and delivering products that result in fewer carbon emissions. Layne has a dedicated team of fleet managers that directly engage manufacturers and their dealers on a regular (and often daily) basis. Additionally, Layne's fleet managers engage with suppliers at industry expos where they demonstrate new and emerging technologies to support Layne's sustainability objectives.

We engage with our customers through the development of targeted communications that explain how our services can support their climate change adaptation and mitigation strategies. We also support our customers through reporting on our sustainability strategy and performance, both prior and during client engagements. Our Mineral Services Division keeps daily logs of energy and water consumption for its customers to support their sustainability strategies and targets. Our Energy Services Division is also active in educating and providing information to clients and the industry regarding technologies and options for sourcing, treating, and recycling water used for hydraulic fracturing to reduce the impact of energy resource development on fresh water resources. We also engage with our customers through pre-qualifications that frequently request that we provide documentation on our own sustainability programs.

Layne also actively engages with our industry to support climate change strategies, often in the context of the nexus between carbon and water. Many of Layne's employees are involved in national and state chapters of these organizations, holding leadership roles and sharing expertise through conference presentations and publications. Examples include the National Groundwater Association (NGWA), Water Environment Federation (WEF), National Association of Water Companies (NAWC), American Society of Civil Engineers (ASCE), Society of Petroleum Engineers (SPE), American Water Resources Association (AWRA) and American Institute of Professional Geologists (AIPG). Layne also participates in a New Orleans-based Water Synergy Project with the United States Business Council for Sustainable Development (USBCSD), a non-profit business association that provides opportunities to work on authentic sustainability projects with industry, governmental and other key stakeholders. Our Layne Hydro Group within the Water Resources Division also serves on the Sustainable Infrastructure (ISI) technical committee for the American Water Works Association (AWWA) to advise on a new sustainability rating system for infrastructure projects.

II. STRATEGY FOR PRIORITIZING ENGAGEMENTS

As fuel comprises approximately 95% of our Scope 1 and 2 emissions, we prioritize our fleet and equipment when engaging with suppliers on climate change-related issues. Our level of engagement with customers on climate change-related issues is often prioritized based on the level of interest within the varied public and private sectors we serve. Our value chain engagement with industry peers is typically driven by our assessment of where we can add the greatest value and offer the most expertise.

III. MEASURES OF SUCCESS

Layne's sustainability business plan sets forth S.M.A.R.T. goals and key performance indicators from which we measure our success. As our greatest opportunities come from delivering sustainable solutions to our clients and reducing our expenditures and emissions associated with fuel, important measures of success are our ability to (1) increase revenue from sustainability solutions and (2) reduce our annual fuel spend as a percentage of revenue.

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	Comment
15	60%	Please see response to Question 14.4(a) for additional detail.

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
Managing the impact of regulation in the supply chain	As Layne's greatest emissions impacts are related to fuel consumption, we actively engage with the dealers and manufacturers of our fleet and equipment to manage compliance with the U.S. Department of Transportation regulations, and to identify innovation opportunities, such as electric rigs and low carbon fuel sources, that we can further integrate into our fleet and use to deliver increased value to our customers.
Stimulating innovation of new products	As Layne's greatest emissions impacts are related to fuel consumption, we actively engage with the dealers and manufacturers of our fleet and equipment to manage compliance with the U.S. Department of Transportation regulations, and to identify innovation opportunities, such as electric rigs and low carbon fuel sources, that we can further integrate into our fleet and use to deliver increased value to our customers.

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
Troy Hantla	Sr. HR Manager – Compensation, Labor Relations & HRIS	Environment/Sustainability manager

Further Information

CDP