

### Module: Introduction

#### Page: Introduction

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#### 0.1

##### **Introduction**

Please give a general description and introduction to your organization

Incitec Pivot is a leading global chemicals company with nitrogen-based manufacturing at its core providing commercial explosives, fertiliser products and related services. Incitec Pivot has extensive operations throughout the Australia, United States, Canada, Mexico, Turkey and Indonesia, including over 30 manufacturing plants, scores of distribution centres and well-established channels to market. The Company employs over 5,000 staff worldwide, 1,800 staff in Australia. Incitec Pivot manufactures a range of fertiliser inputs and products including ammonium phosphates, ammonia, urea, sulphuric acid and superphosphates at five manufacturing sites across eastern Australia. Incitec Pivot is the only domestic manufacturer of ammonium phosphates and urea. Incitec Pivot's fertiliser business, Incitec Pivot Fertilisers (IPF) is Australia's largest supplier of fertilisers, dispatching approximately two million tonnes each year for use in the grain, cotton, pasture, dairy, sugar and horticulture industries. It operates through a comprehensive network of distributors who supply the product to Australian farmers. With a long-term commitment to investment into soil nutrition research, IPF is a leading provider of nutrition advice for farmers and customers and is industry accredited, promoting sustainable use of fertilisers and safe handling to customers and farmers.

Incitec Pivot's explosives business Dyno Nobel is a market leader in North America and the second largest supplier in Australia. Dyno Nobel has a complete range of commercial explosives including ammonium nitrate, bulk explosives, packaged emulsions and dynamite as well as a range of initiating systems. The business includes provision of expert technical consulting services to customers that include mining companies and their suppliers, quarries and companies supporting the construction industry.

In addition, Incitec Pivot manufactures various industrial chemical products used in water treatment, process manufacturing and other industrial applications. Incitec Pivot's sustainability agenda is driven by the Vision and seven Values which all employees live by. Incitec Pivot recognises that sustainable growth requires the balancing of economic performance with environmental and social responsibilities. Those responsibilities include being a good corporate citizen and operating ethically. They include ensuring good governance in our day-to-day business activities and behaving with honesty and integrity in our interactions with communities, employees, customers, and the environment. Incitec Pivot's approach to sustainability includes the areas of: workplace health and safety, environmental impacts and resource efficiency, community impact and engagement, labour practices and product and services.

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#### 0.2

**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 Oct 2011 - Sun 30 Sep 2012

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**0.3****Country list configuration**

Please select the countries for which you will be supplying data. This selection will be carried forward to assist you in completing your response

Select country
Australia
United States of America
Rest of world

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**0.4****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.

AUD (\$)

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## 0.6

### **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 sectors, companies in the oil and gas industry and companies in the information technology and telecommunications sectors should complete supplementary questions in addition to the main questionnaire.

If you are in these sectors (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@cdproject.net](mailto:respond@cdproject.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.cdproject.net/en-US/Programmes/Pages/More-questionnaires.aspx>.

## **Module: Management [Investor]**

### **Page: 1. Governance**

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## 1.1

### **Where is the highest level of direct responsibility for climate change within your company?**

Individual/Sub-set of the Board or other committee appointed by the Board

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## 1.1a

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

The Incitec Pivot Board of Directors is responsible for charting the direction, policies, strategies and financial objectives of the Company. The Company's sustainability strategy, encompassing its climate change strategy, was endorsed by the Board. Day to day management and implementation of strategy and policy initiatives is formally delegated to the Managing Director & CEO. Vice President Sustainability is the individual that specifically manages information on climate change. This position reports to the Chief Financial Officer.

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## 1.2

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

Yes

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1.2a

**Please complete the table**

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator
Other: Environment/sustainability managers	Monetary reward	Develop and implement sustainability targets for resource reduction (energy and CO2e, water, and waste to landfill)
Facility managers	Monetary reward	Meeting energy reduction targets in Australia

**Page: 2. Strategy**

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2.1

**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

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2.1a

**Please provide further details**

The highest governing body is the Board of Directors. The Board is responsible for charting the direction, policies, strategies and financial objectives of the Company. The Board serves the interests of the Company and its shareholders, as well as our other stakeholders such as employees, customers and the community, in a manner designed to create and continue to build sustainable value. The Board operates in accordance with the principles set out in its Board Charter. A copy of the Board Charter is available on the corporate governance section of the Company's website, [www.incitecpivot.com.au/Corporate\\_Governance](http://www.incitecpivot.com.au/Corporate_Governance). The Charter sets out the Board's own tasks and activities, as well as the matters it has reserved for its own consideration and decision-making. To assist the Board in meeting its responsibilities, the Board currently has the following four Committees:

- the Audit and Risk Management Committee;
- the Nominations Committee;
- the Remuneration Committee; and

- the Health, Safety, Environment and Community Committee

Day-to-day management of Company affairs and the implementation of the corporate strategy and policy initiatives are formally delegated to the Managing Director & CEO. The Managing Director & CEO and his direct reports form the Executive Team. Responsibility for sustainability strategy and governance resides with the Executive Team, advised by the Corporate Sustainability Team. The Corporate Sustainability Team is led by the Vice President, Sustainability who reports to the Chief Financial Officer, thereby providing alignment with the financial performance for the Company and overall risk management.

Incitec Pivot manage risk within a comprehensive risk management process which is consistent with the Australian/New Zealand Standard for Risk Management (AS/NZS ISO 31000:2009). A key element of this risk management process is the Board's assessment of risk, which is based on the level of risk we are able to sustain in achieving corporate objective of delivering value to shareholders. Risks are identified, analysed and prioritised using common methodologies and risk controls are designed and implemented having regard to the overall corporate strategy. Sustainability risks and opportunities, inclusive of climate change, are considered within this annual risk review process.

In addition, as part of the process to set the Incitec Pivot Sustainability Strategy a small cross-business sustainability risk exposure team was created. This team conducted a one-time review which identified and prioritised sustainability risks and opportunities across the supply chain using a risk impact assessment process which informed our sustainability strategy.

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## 2.2

### Is climate change integrated into your business strategy?

Yes

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## 2.2a

### Please describe the process and outcomes

Our highest governing body is the Board of Directors. The Board is responsible for charting the direction, policies, strategies and financial objectives of the Company. The Board serves the interests of the Company and its shareholders, as well as our other stakeholders such as employees, customers and the community, in a manner designed to create and continue to build sustainable value. The Board operates in accordance with the principles set out in its Board Charter. A copy of the Board Charter is available on the corporate governance section of the Company's website, [www.incitecpivot.com.au/Corporate\\_Governance](http://www.incitecpivot.com.au/Corporate_Governance). The Charter sets out the Board's own tasks and activities, as well as the matters it has reserved for its own consideration and decision-making.

Day-to-day management of Company affairs and the implementation of the corporate strategy and policy initiatives are formally delegated to the Managing Director & CEO. The Managing Director & CEO and his direct reports form the Executive Team. Responsibility for sustainability strategy and governance resides with the Executive Team, advised by the Corporate Sustainability Team. The Corporate Sustainability Team is led by the Vice President, Sustainability who reports to the Chief Financial Officer, thereby providing alignment with the financial performance for the Company.

Consideration of climate change and carbon regulation is integrated into our business strategy where we review the potential impacts through a business lens. In our business energy costs are a significant cost to operations and a focus at the Executive level. In particular, consideration of future carbon regulation is part of our capital expenditure program with forecasting of greenhouse gas emissions and the potential associated carbon pricing included in all our capital expansion projects.

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2.2b

Please explain why not

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2.3

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

Direct engagement  
Trade associations  
Funding research organizations

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2.3a

**On what issues have you been engaging directly?**

Focus of legislation	Corporate Position	Details of engagement	Proposed solution
Cap and trade	Support with major exceptions	Respond to Government discussion papers and participate in workshops	Simplification and alignment of related energy and greenhouse gas reporting legislation and regulation, and removal of red tape and excess administration

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2.3b

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

No

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2.3c

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?
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2.3d

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

Yes

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2.3e

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

Yes

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2.3f

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

In 2012 Incitec Pivot commenced research on two new projects with the University of Melbourne:

- (i) Mitigation of indirect greenhouse gases in intensive agricultural systems with the use of inhibitors
- (ii) Reducing nitrous oxide emissions from applied nitrogen with nitrification inhibitors through identification of key drivers of importance.

These projects are jointly funded by the Australian Government's Department of Agriculture, Fisheries and Forestry and continue our long standing association with the University of Melbourne.

This work aligns with our sustainability strategy of actively mitigating risks and leveraging opportunities. This broad sustainability strategy encompasses our strategy on climate change.

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2.3g

Please provide details of the other engagement activities that you undertake

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2.3h

**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?**

Our highest governing body is the Board of Directors. The Board is responsible for charting the direction, policies, strategies and financial objectives of the Company. Our sustainability strategy, encompassing our strategy on climate change, was set by the Board. Day-to-day management of Company affairs and the implementation of the corporate strategy and policy initiatives are formally delegated to the Managing Director & CEO. The Managing Director & CEO and his direct reports form the Executive Team. Responsibility for sustainability strategy and governance resides with the Executive Team, advised by the Corporate Sustainability Team. The Corporate Sustainability Team is led by the Vice President, Sustainability who reports to the Chief Financial Officer, thereby providing alignment with the financial performance and financial processes for the Company.

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2.3i

Please explain why you do not engage with policy makers

### Page: 3. Targets and Initiatives

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3.1

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

Intensity target

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3.1a

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
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### 3.1b

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
1	Scope 1+2	50%	1.5%	metric tonnes CO2e per metric tonne of product	2010		2015	Targets set for emissions from electricity and natural gas for all of Australian Manufacturing, including 'electricity only' manufacturing sites

### 3.1c

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
			No change	0	Although Incitec Pivot's intensity (emissions per tonne of production) will decrease in line with targets, our absolute Scope 1 emissions are expected to increase due to increased production relating to the commissioning of a new manufacturing plant during late 2012. There is no specific target for Scope 3 emissions

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3.1d

Please provide details on your progress against this target made in the reporting year

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

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3.1e

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

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3.2

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

Yes

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3.2a

Please provide details (see guidance)

**1. Use of nitrogen fertilisers helps to increase yields of food and biodiesel per hectare, reducing greater GHG emissions associated with land clearing.**

(i) Emissions are avoided by increasing yields to meet food and biofuel demands using less cleared land, which preserves more forests for sequestration of CO<sub>2</sub>.

(ii) Fertiliser use (including manufacture) is estimated to have avoided 161 Gt of CO<sub>2</sub>e since 1961, or 31.1Gt / year.\*

\*Snyder et al (2010) *Global crop intensification lessens greenhouse gas emissions*, *Better Crops* 94, (4) 16-17

\*Burney et al (2010) *Greenhouse gas mitigation by agricultural intensification*. *Proc Natl Acad Sci USA* 2010 Jun 29;107(26):12052-7. Epub 2010 June 15.

(iii) The methodology and assumptions used in this study can be obtained from the journal articles referenced above.

(iv) Carbon credits will not be sought.

## 2. Use of 'Green Urea' fertiliser may reduce GHG emissions in agriculture

- (i) Urea inhibitors delay the hydrolysis of urea into nitrogen forms that may enter the atmosphere during volatilisation.
- (ii) Losses of nitrous oxides to the atmosphere are estimated to be reduced by a conservative 50%, but are difficult to quantify due to being affected by precipitation and application techniques. Agronomy services and education are provided to customers to increase knowledge and maximise emissions reductions.
- (iii) No exact methodology to measure reductions in emissions has been developed as yet.
- (iv) No carbon credits will be sought.

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### 3.3

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

Yes

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### 3.3a

**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	8	
To be implemented*	0	0
Implementation commenced*	0	0
Implemented*	4	2601
Not to be implemented	4	

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### 3.3b

**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)	Annual monetary savings (unit currency - as specified in Q0.4)	Investment required (unit currency - as specified in Q0.4)	Payback period
Energy efficiency: Processes	Voluntarily replaced catalyst baskets in synthesis loop with an axial-radial flow basket to reduce system pressure and therefore amp load to reduce Scope 2 emissions	1018	90000	2500000	1-3 years
Energy efficiency: Processes	Voluntarily undertook steam trap monitoring, repair and replacement to reduce Scope 1 emissions	604	41400	22700	<1 year
Energy efficiency: Processes	Voluntarily reconfigured development pilot plant to reduce Scope 1 emissions	863	104500	100000	<1 year
Energy efficiency: Processes	Voluntarily undertook optimisation of climate control system to reduce Scope 2 emissions	116	9400	9000	1-3 years

### 3.3c

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

Method	Comment
Compliance with regulatory requirements/standards	A new 5 year EEO plan has been approved since year end.
Partnering with governments on technology development	IPL undertakes a range of research projects with Universities across Australia.
Other	A key part of Incitec Pivot's Sustainability agenda is a focus on more efficient use of non-renewable resources. A number of projects have commenced (post year end) at Australian sites as a result of this agenda and working groups lead by the Corporate Environmental Sustainability Manager.

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3.3d

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

**Page: 4. Communication**

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4.1

Have you published information about your company'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	Page/Section reference	Attach the document
In voluntary communications (complete)	Pages 22, 23/Environment section	<a href="https://www.cdproject.net/sites/2013/14/8914/Investor%20CDP%202013/Shared%20Documents/Attachments/Investor-4.1-C3-IdentifyAttachment/Investor-4.1-PublishedInformation1/ipl_sustainability_report_2012.pdf">https://www.cdproject.net/sites/2013/14/8914/Investor CDP 2013/Shared Documents/Attachments/Investor-4.1-C3-IdentifyAttachment/Investor-4.1-PublishedInformation1/ipl_sustainability_report_2012.pdf</a>

**Module: Risks and Opportunities [Investor]**

**Page: 5. Climate Change Risks**

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5.1

Have you identified any climate change risks (current or future) 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

**5.1a**

**Please describe your risks driven by changes in regulation**

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
1.	Emission reporting obligations	Carbon reporting has impacted IPL resources to enable compliance	Increased operational cost	Current	Direct	Virtually certain	Low
2.	Carbon taxes	As a nitrogen based manufacturer, IPL's operations are carbon intensive and therefore a carbon price will impact IPL as a trade exposed Company	Increased operational cost	1-5 years	Direct	Virtually certain	Low

**5.1b**

**Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk and (iii) the costs associated with these actions**

**1. Emission reporting obligations**

(i) IPL has prepared for emission reporting obligations within Australia under the current regime. The potential financial risks of non-compliance are Government penalties. Corporations that fail to register and report or otherwise comply with obligations under the NGER Act may be liable for penalties. The NGER Act allows for administrative, civil and/or criminal responses in relation to contraventions of the Act. Part 5 of the NGER Act sets out penalty provisions. These include fines of up to \$340,000 (2,000 penalty units) for failure to apply for registration, and daily fines of up to \$17,000 (100 penalty units) for each day of non-compliance.

(i) In September 2010, IPL created a Sustainability Strategy which includes it's approach to carbon risk. The financial risk of carbon costs is actively managed by the Sustainability Team, led by the CFO to ensure that risk is managed at the Executive level. The key methods being used to mitigate the risk are education of key

staff involved in the reporting and the introduction of internal controls over data accuracy. In 2012 an external review of our National Greenhouse Reporting in Australia formed part of our internal audit processes to assist in managing the potential risk of incorrect reporting.

(ii) Costs associated with compliance actions are estimated to be approximately \$400,000 per annum.

## 2. Carbon pricing

(i) IPL has prepared for emission reporting obligations within Australia under the current regime with the potential financial risk being a permit cost, pre-assistance, of over \$35 million per annum plus carbon costs being passed through by suppliers also impacted by the Clean Energy Act.

(ii) In September 2010, IPL created a Sustainability Strategy which includes its approach to carbon risk. The financial risk of carbon costs is actively managed by the Sustainability Team, led by the CFO to ensure that risk is managed at the Executive level. The Sustainability Team manages all assistance applications which related to carbon pricing and works with operations to increase energy efficiency, actions to reduce the financial impacts. Additionally, an education plan has been rolled out across the Australian finance team and key operations staff to increase awareness of potential costs and risks along with Group wide communications. In 2012 a voluntary assurance of our National Greenhouse Reporting in Australia formed part of our internal audit processes, designed to strengthen our data processes, including data accuracy, ahead of carbon regulation. Carbon pricing has been integrated into the accounting system and processes to track costs as they incur and forecast impacts.

(iii) An analysis of predicted permit costs, inclusive of supplier pass through costs has been made for the fixed price period and this is estimated at less than \$10 million per annum.

### 5.1c

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

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
1.	Change in precipitation extremes and droughts	Extreme weather conditions may impact IPL's production as well as sections of IPL's customer base, particularly IPL's fertiliser trade and mine access for mining customers	Inability to do business	Current	Indirect (Client)	More likely than not	Unknown
2.	Tropical cyclones (hurricanes and typhoons)	An increase in the incidence of natural disasters may affect IPL's production as well as sections of IPL's customer base, particularly the fertiliser trade.	Reduction/disruption in production capacity	Current	Direct	More likely than not	Unknown

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**5.1d**

**Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; and (iii) the costs associated with these actions**

**1. Change in precipitation extremes and droughts**

(i) The financial implications of extreme weather events, including drought, flood and the incidence of tropical cyclones include possible temporary disruption to production and trade which could negatively impact the timing and/or quantity of revenue earned and result in increased repairs and maintenance costs.

(ii) The potential operations exposure to physical risks and associated mitigation is reviewed as part of our Health Safety Environment risk management processes and business continuity planning.

(iii) Costs associated with these actions are difficult to quantify.

**Tropical cyclones (hurricanes and typhoons)**

(i) The financial implications of extreme weather events, including drought, flood and the incidence of tropical cyclones include possible temporary disruption to production and trade which could negatively impact the timing and/or quantity of revenue earned and result in increased repairs and maintenance costs.

(ii) The potential operations exposure to physical risks and associated mitigation is reviewed as part of our Health Safety Environment risk management processes and business continuity planning.

(iii) Costs associated with these actions are difficult to quantify.

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**5.1e**

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

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
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ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
1	Reputation	Business reputation risk if Sustainability and Climate Change actions are not addressed and communicated	Reduced stock price (market valuation)	1-5 years	Direct	More likely than not	Unknown

#### 5.1f

**Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; (iii) the costs associated with these actions**

#### 1. Reputation

(i) Potential financial implications of the risk to business reputation in the event of ignoring sustainability and climate change issues include a possible reduction in investor interest and low morale of employees.

(ii) This has been actively mitigated by the formalising of a Sustainability Strategy and a position on Climate Change together with increased communications and employee education. In particular the communications plan includes a step change in our public Sustainability Reporting, increased internet disclosures as well as and the provision of regular internal communications about our Sustainability actions and achievements.

(iii) The costs associated with these actions are difficult to quantify.

#### 5.1g

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

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5.1h

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

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5.1i

Please explain why you do not consider your company to be exposed to 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

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**Page: 6. Climate Change Opportunities**

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6.1

**Have you identified any climate change opportunities (current or future) 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

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6.1a

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

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
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ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
1.	Cap and trade schemes	Increased customer demand for Dyno Noble's energy efficient and low NOx explosives and Incitec Pivot Fertilisers' low emission fertilisers leading to increased sales revenue and a changed product mix	New products/business services	1-5 years	Indirect (Client)	Likely	Low-medium
2.	Cap and trade schemes	Increasing operational energy efficiency in IPL's global manufacturing plants to reduce emissions leading to reduced costs to manufacture	New products/business services	Current	Direct	Virtually certain	Low-medium

## 6.1b

**Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity and(iii) the costs associated with these actions**

### 1. Cap and trade schemes: Customer

(i)As demand for low emission products increases, IPL has the opportunity to supply internally developed low emission products and support services such as soil management and energy efficient blasting to customers which has the potential to increase global sales revenue.

(ii) IPL has three laboratories where research and development of new products is being undertaken to meet the future demand of customers for products with a reduced carbon footprint. In addition, research by the University of Melbourne is being funded into:

- Mitigation of indirect greenhouse gases in intensive agricultural production systems with the use of inhibitors.
- Reducing nitrous oxide emissions from applied nitrogen with nitrification inhibitors through identification of key drivers of performance

(iii)Costs associated with research and development of new products and with directing staff have been quantified but not disclosed in this response.

### 2. Cap and trade schemes: Energy efficiency

(i)There is some potential to reduce costs by increasing energy efficiency, gas, diesel and electricity consumption at manufacturing and product distribution sites.

(ii) In 2012 IPL introduced three year reduction targets for energy use and GHG emissions for IPL's Australian manufacturing operations. This is part of IPL's long term global focus on running energy efficient plants. The targets were determined using a 'bottom-up' approach, with each major Australian manufacturing site calculating reductions achievable in the three year time frame. These reductions were then consolidated to determine the Australia-wide reduction targets. For these targets, IPL adopted a production-based intensity indicator, as approximately 95% of IPL's energy use and GHG emissions relate directly to IPL's manufacturing production. In Australia, we are part of the Australian Government's Energy Efficiency Opportunities program and have been recognised by the Government as a

“Best Practice” participant. IPL’s case study appears on the Government website at [www.ret.gov.au](http://www.ret.gov.au). All of the nitric acid plants we currently operate have NOx abatement technology in place except IPL’s Louisiana, Missouri, USA plant. Investigations into appropriate abatement technology for the Louisiana plant are underway. The particular technology in place at IPL’s other nitric acid plants abates nitrous oxide to significantly reduce GHG emissions. The new Moranbah plant in Queensland, Australia, has N2O (GHG) abatement. Each site determines the best way to achieve energy reduction for that site.

(iii) Costs associated with actions to increase energy efficiency have not been quantified

## 6.1c

Please describe the opportunities that are driven by changes in physical climate parameters

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
1.	Change in precipitation pattern	Changes in weather patterns, particularly concerning rain will impact the timing of fertilizer application of IPL fertiliser products and therefore the timing of sales		Unknown	Indirect (Client)	Unknown	Unknown

## 6.1d

Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity and (iii) the costs associated with these actions

### 1. Change in precipitation pattern

(i) This has not been quantified.

(ii) IPL’s agronomy team maintains a close relationship with the Department of Agriculture, Fisheries and Forestry and related agencies, who are undertaking research into potential impacts on agriculture from climate change to ensure they are up to date with scientific findings which would have implications for customers and their product needs.

(iii) Costs associated with research and development of new products and with directing staff have been quantified but not disclosed in this response.

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**6.1e**

**Please describe the opportunities that are driven by changes in other climate-related developments**

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
1.	Changing consumer behaviour	Changing consumer trends may impact IPL's customers and therefore IPL's products and services, particularly IPL's agricultural customers	New products/business services	Unknown	Indirect (Client)	Unknown	Unknown

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**6.1f**

**Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity; (iii) the costs associated with these actions**

**1. Changing consumer behaviour**

(i) This has not been quantified.

(ii) The research and development undertaken at IPL's laboratories targets the current and future needs of IPL's customers

(iii) Costs associated with research and development of new products and with directing staff have been quantified but not disclosed in this response.

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**6.1g**

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

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6.1h

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

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6.1i

Please explain why you do not consider your company to be exposed to 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

## Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading [Investor]

### Page: 7. Emissions Methodology

---

7.1

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

Base year	Scope 1 Base year emissions (metric tonnes CO2e)	Scope 2 Base year emissions (metric tonnes CO2e)
Mon 01 Oct 2007 - Thu 30 Oct 2008	1316000	256000

---

7.2

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	
Australia - National Greenhouse and Energy Reporting Act	
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)	

---

7.2a

If you have selected 'Other', please provide details below

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7.3

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

Gas	Reference
CO2	IPCC Second Assessment Report (SAR - 100 year)
CH4	IPCC Second Assessment Report (SAR - 100 year)
N2O	IPCC Second Assessment Report (SAR - 100 year)
SF6	IPCC Second Assessment Report (SAR - 100 year)

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7.4

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

Fuel/Material/Energy	Emission Factor	Unit	Reference

---

#### Further Information

Excel spread sheet attached

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#### Attachments

[https://www.cdproject.net/sites/2013/14/8914/Investor CDP 2013/Shared Documents/Attachments/InvestorCDP2013/7.EmissionsMethodology/CDP Emissions 2012](https://www.cdproject.net/sites/2013/14/8914/Investor%20CDP%202013/Shared%20Documents/Attachments/InvestorCDP2013/7.EmissionsMethodology/CDP%20Emissions%202012)

#### Page: 8. Emissions Data - (1 Oct 2011 - 30 Sep 2012)

---

##### 8.1

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

Operational control

---

##### 8.2

Please provide your gross global Scope 1 emissions figures in metric tonnes CO<sub>2</sub>e

1967663

---

##### 8.3

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

363080

---

8.4

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

Yes

---

8.4a

Please complete the table

Source	Scope	Explain why the source is excluded
Emissions from offsite transport of product in North America	Scope 1	Data is presently unavailable. Very low materiality (estimated to be less than 0.01% of total emissions).
Emissions from electricity in small remote offices and despatch sites in North America	Scope 2	Data is presently unavailable. Very low materiality (estimated to be less than 0.01% of total emissions).

---

8.5

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 1 emissions: Uncertainty range	Scope 1 emissions: Main sources of uncertainty	Scope 1 emissions: Please expand on the uncertainty in your data	Scope 2 emissions: Uncertainty range	Scope 2 emissions: Main sources of uncertainty	Scope 2 emissions: Please expand on the uncertainty in your data
More than 2% but less than or equal to 5%	Metering/ Measurement Constraints Data Management	1. Uncertainty associated with systematic biases occurring in the estimation process, e.g. accuracy of measurement equipment 2. Statistical uncertainty associated with human error which may have occurred in data management. This risk has been reduced by independent verification/assurance.	Less than or equal to 2%	Data Gaps Metering/ Measurement Constraints Data Management	1. Estimations of the electricity use at some small remote sites have been made. These make up less than 0.05% of total emissions. 2. Uncertainty associated with systematic biases occurring in the estimation process, e.g. accuracy of measurement equipment 3. Statistical uncertainty associated with human error which may have occurred in data management. This risk has been reduced by independent verification/assurance.

8.6

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

Third party verification or assurance complete

8.6a

**Please indicate the proportion of your Scope 1 emissions that are verified/assured**

More than 40% but less than or equal to 60%

8.6b

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

Type of verification or assurance	Relevant standard	Attach the document
Limited assurance	ASAE3000	<a href="https://www.cdproject.net/sites/2013/14/8914/Investor%20CDP%202013/Shared%20Documents/Attachments/Investor-8.6b-C3-RelevantStatement/Investor-8.6b-VerificationDetails1/FINAL%20NGERS%20Assurance%20Report%20121015%20(2).pdf">https://www.cdproject.net/sites/2013/14/8914/Investor CDP 2013/Shared Documents/Attachments/Investor-8.6b-C3-RelevantStatement/Investor-8.6b-VerificationDetails1/FINAL NGERS Assurance Report 121015 (2).pdf</a>

8.6c

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
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8.7

Please indicate the verification/assurance status that applies to your Scope 2 emissions

Third party verification or assurance complete

8.7a

Please indicate the proportion of your Scope 2 emissions that are verified/assured

More than 40% but less than or equal to 60%

8.7b

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

Type of verification or assurance	Relevant standard	Attach the document
Limited assurance	ASAE3000	<a href="https://www.cdproject.net/sites/2013/14/8914/Investor%20CDP%202013/Shared%20Documents/Attachments/Investor-8.7b-C3-RelevantStatement/Investor-8.7b-VerificationDetailsS21/FINAL%20NGERS%20Assurance%20Report%20121015%20(2).pdf">https://www.cdproject.net/sites/2013/14/8914/Investor CDP 2013/Shared Documents/Attachments/Investor-8.7b-C3-RelevantStatement/Investor-8.7b-VerificationDetailsS21/FINAL NGERS Assurance Report 121015 (2).pdf</a>

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8.8

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

No

---

8.8a

Please provide the emissions in metric tonnes CO2

**Page: 9. Scope 1 Emissions Breakdown - (1 Oct 2011 - 30 Sep 2012)**

---

9.1

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

Yes

---

9.1a

Please complete the table below

Country/Region	Scope 1 metric tonnes CO2e
Australia	1085354
United States of America	880600
Rest of world	1709

---

9.2

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

By business division

---

9.2a

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

Business division	Scope 1 emissions (metric tonnes CO2e)
Incitec Pivot Fertilisers	1037270
Dyno Nobel North America	881067
Dyno Nobel Asia Pacific	48084
Nitromak	1241

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9.2b

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

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
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9.2c

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

GHG type	Scope 1 emissions (metric tonnes CO2e)
----------	----------------------------------------

---

9.2d

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

Activity	Scope 1 emissions (metric tonnes CO2e)
----------	----------------------------------------

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9.2e

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

Legal structure	Scope 1 emissions (metric tonnes CO2e)
-----------------	----------------------------------------

---

**10.1**

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

Yes

---

**10.1a**

**Please complete the table below**

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 (MWh)
Australia	178792	186129	23
United States of America	178295	346296	0
Rest of world	5992	15198	0

---

**10.2**

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

By business division

---

**10.2a**

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

Business division	Scope 2 emissions (metric tonnes CO2e)
-------------------	----------------------------------------

<b>Business division</b>	<b>Scope 2 emissions (metric tonnes CO2e)</b>
Incitec Pivot Fertilisers	176282
Dyno Nobel North America	183620
Dyno Nobel Asia Pacific	2511
Nitromak	667

---

**10.2b**

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

<b>Facility</b>	<b>Scope 2 emissions (metric tonnes CO2e)</b>
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**10.2c**

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

<b>Activity</b>	<b>Scope 2 emissions (metric tonnes CO2e)</b>
-----------------	-----------------------------------------------

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**10.2d**

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

<b>Legal structure</b>	<b>Scope 2 emissions (metric tonnes CO2e)</b>
------------------------	-----------------------------------------------

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11.1

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

---

11.2

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	9317175
Electricity	547651
Heat	0
Steam	0
Cooling	0

---

11.3

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

Fuels	MWh
Natural gas	9211558
Diesel/Gas oil	103364
Propane	717
Motor gasoline	230
Biodiesels	1305

---

**11.4**

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor

Basis for applying a low carbon emission factor	MWh associated with low carbon electricity, heat, steam or cooling	Comments
Other	23.5	100% solar power purchased (grid connected)

---

**Page: 12. Emissions Performance**

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**12.1**

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

Increased

---

**12.1a**

Please complete the table

Reason	Emissions value (percentage)	Direction of change	Comment
Emissions reduction activities			
Divestment			
Acquisitions			
Mergers			
Change in output	5	Increase	Increased Australian production during the year.
Change in methodology			
Change in boundary			
Change in physical operating conditions			
Unidentified			

Reason	Emissions value (percentage)	Direction of change	Comment
Other	2	Increase	The commissioning of a new plant at Moranbah, Queensland Australia late in the reporting year.

## 12.2

Please describe your gross 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
0.0006657554	metric tonnes CO2e	unit total revenue	8	Increase	This change is due to a decrease in revenue. Increase in total emissions has been minimal.

## 12.3

Please describe your gross 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
451.51935	metric tonnes CO2e	FTE employee	1.6	Decrease	This increase is due to an increase in employees. Increase in total emissions has been minimal.

## 12.4

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
0.003274895	metric tonnes CO2e	Other: Net Profit (\$AUD)	6	Decrease	This decrease is due to an increase in profit while emissions remained relatively stable.

### Page: 13. Emissions Trading

#### 13.1

Do you participate in any emissions trading schemes?

Yes

#### 13.1a

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
Other: Australian Clean Energy Future - Carbon Price	Sun 01 Jul 2012 - Wed 31 Oct 2012	1200000	0	1264146	Facilities we own and operate

#### 13.1b

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

Day-to-day management of Company affairs and the implementation of the corporate strategy and policy initiatives are formally delegated to the Managing Director & CEO. The Managing Director & CEO and his direct reports form the Executive Team. Responsibility for sustainability strategy and governance, inclusive of compliance with the Australian Clean Energy Future Scheme, resides with the Executive Team, advised by the Corporate Sustainability Team.

The Corporate Sustainability Team is led by the Vice President, Sustainability who reports to the Chief Financial Officer, thereby providing alignment with the financial performance for the Company and overall risk management. In particular, the Vice President Sustainability is specifically responsible for the carbon cost management strategy, including carbon permit acquisition and surrender, assistance applications, reporting and assurance.

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**13.2**

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

No

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**13.2a**

Please complete the table

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 retired	Purpose, e.g. compliance
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**Page: 14. Scope 3 Emissions**

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**14.1**

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

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
Purchased goods and services	Not evaluated				
Capital goods	Not evaluated				
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Not evaluated				
Upstream transportation and distribution	Not evaluated				
Waste generated in operations	Not evaluated				
Business travel	Not evaluated				
Employee commuting	Not evaluated				
Upstream leased assets	Not relevant, explanation provided				IPL has no upstream leased assets
Investments	Not evaluated				
Downstream transportation and distribution	Not evaluated				
Processing of sold products	Not evaluated				
Use of sold products	Relevant, not yet calculated				In 2012 Incitec Pivot commenced research on two new projects with the University of Melbourne: (i) Mitigation of indirect greenhouse gases in intensive agricultural systems with the use of inhibitors (ii) Reducing nitrous oxide emissions from applied nitrogen with nitrification inhibitors through identification of key drivers of importance. These projects are jointly funded by the Australian Government's Department of Agriculture, Fisheries and Forestry and continue our long standing association with the University of Melbourne.

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
End of life treatment of sold products	Not evaluated				
Downstream leased assets	Not evaluated				
Franchises	Not relevant, explanation provided				Incitec Pivot has no franchises
Other (upstream)	Not evaluated				
Other (downstream)	Not evaluated				

#### 14.2

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

No emissions data provided

#### 14.2a

**Please indicate the proportion of your Scope 3 emissions that are verified/assured**

#### 14.2b

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

Type of verification or assurance	Relevant standard	Attach the document
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**14.3**

**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

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**14.3a**

Please complete the table

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
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**14.4**

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

No, we do not engage

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**14.4a**

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

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14.4b

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

Number of suppliers	% of total spend	Comment
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14.4c

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
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14.4d

**Please explain why not and any plans you have to develop an engagement strategy in the future**

IPL is currently developing an engagement strategy for certain key suppliers and anticipate being able to report on this next year.

**Module: Sign Off**

**Page: Sign Off**

---

**Please enter the name of the individual that has signed off (approved) the response and their job title**

Clare Luehman  
Vice President Global Sustainability

**CDP**