Incitec Pivot Limited

# 2024 CDP Corporate Questionnaire 2024

## Word version



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# C1. Introduction

## (1.1) In which language are you submitting your response?

☑ English

## (1.2) Select the currency used for all financial information disclosed throughout your response.

☑ AUD

## (1.3) Provide an overview and introduction to your organization.

### (1.3.2) Organization type

☑ Publicly traded organization

### (1.3.3) Description of organization

*Incitec Pivot Limited (IPL) has two industry leading businesses, Dyno Nobel and Incitec Pivot Fertilisers (IPF), which supply the resources and agricultural sectors. Serving customers across six continents, including Australia, North America, Europe, Asia, South America and Africa, we manufacture ammonium nitrate-based explosives and initiating systems, nitrogen and phosphorus fertilisers, and nitrogen related industrial and specialty chemicals with 60 manufacturing facilities and joint ventures.*

*Dyno Nobel is IPL's global explosives business. It is the largest industrial explosives distributor (by earnings) in North America and the second-largest industrial explosives provider in Australia. Dyno Nobel Americas (DNA) provides ammonium nitrate (AN), initiating systems (IS) and technical services to the Quarry and Construction sector primarily in the Southern US, Northeast US and Canada; the Base and Precious Metals sector in the US mid-West, US West and Canada and the Coal sector in the Powder River Basin, Illinois Basin and Appalachia. Dyno Nobel Asia Pacific (DNAP) provides ammonium nitrate based industrial explosives, initiating systems and services to the Metallurgical (MET) Coal and Base and Precious Metals sectors in Australia, and internationally to a number of countries including Indonesia, Papua New Guinea and Turkey through its subsidiaries and joint ventures. With the purchase of Titanobel in 2022, Dyno Nobel entered the French quarry and construction market and gained access to New Caledonian and West African markets with future facing mineral opportunities. When combined with the existing Nitromak business in Turkey, this provides a compelling foundation to grow the business across Europe, the Middle East and Africa. Dyno Nobel's GHG intensive manufacturing activities are located in North America and Australia. Dyno Nobel manufactures ammonium nitrate at its Cheyenne, Wyoming and Louisiana, Missouri and Moranbah, Queensland plants. It also has a 50% interest in the fully integrated, state of the art ammonium nitrate facility near Moura in*

*Central Queensland. (Since this latter facility is not wholly owned and operated by Dyno Nobel, these GHG are included in IPL's Scope 3 reporting under 'Investments'.*

*Incitec Pivot Fertilisers (IPF) is IPL's fertilisers business. With an unrivalled position across Eastern Australia, it is one of the largest domestic manufacturers and suppliers of fertilisers by volume produced from its strategically positioned manufacturing facilities, including the ammonium phosphate fertiliser plant at Phosphate Hill, complemented by the world scale sulphuric acid plant at Mount Isa, the Gibson Island ammonia manufacturing plant, where conversion to green ammonia is being investigated, and the Geelong Single Super Phosphate (SSP) manufacturing plant. IPF's distribution network includes more than 20 Primary Distribution Centres and stretches from Cairns in North Queensland down the eastern and southern Australian coasts to Port Lincoln in South Australia. These include three EASY Liquids sites based in Boundary Bend, Moree and Whitton, providing a wide range of liquid fertilisers to key agricultural markets close to these distribution points. Internationally, IPF sells to major offshore agricultural markets in Asia Pacific, the Indian subcontinent, Brazil and the US. IPF also procures fertilisers from overseas manufacturers to meet domestic seasonal peaks for its customers' diversified crops.*

*The manufacture of nitrogen-based products is energy intensive as it requires natural gas as both an energy source and a raw material for hydrogen, with carbon dioxide being liberated during manufacturing. For this reason, scope 1 GHG from the production of these essential mining and agricultural products currently makes up 86% of IPL's global Scope 1 and 2 GHG as follows: 31% are nitrous oxide emissions from the manufacture of nitric acid used to make ammonium nitrate; 28% are CO2 emissions from natural gas used for hydrogen production; 21% are GHG associated with the use of natural gas for energy to drive the ammonia manufacturing reactions; and 6% are from on-site gas fired power plants at our ammonia manufacturing facilities. During 2023, we progressed four key projects which support our Net Zero Pathway. These are the Gibson Island Green Ammonia Project, Nitrous Oxide Abatement Projects at out Moranbah, Queensland and Louisiana, Missouri ammonium nitrate manufacturing facilities, and a CCS project at the Waggaman, Louisiana ammonia plant, which was progressed until the sale of the asset during the reporting period, which is the 2023 IPL financial year. These projects are discussed in the 2023 IPL Climate Change Report.*
*[Fixed row]*

## (1.4) State the end date of the year for which you are reporting data. For emissions data, indicate whether you will be providing emissions data for past reporting years.

| | End date of reporting year | Alignment of this reporting period with your financial reporting period | Indicate if you are providing emissions data for past reporting years |
|---|---|---|---|
| | *09/30/2023* | *Select from:*<br>☑ Yes | *Select from:*<br>☑ No |

### (1.5) Provide details on your reporting boundary.

| | Is your reporting boundary for your CDP disclosure the same as that used in your financial statements? |
|---|---|
| | *Select from:*<br>☑ Yes |

*[Fixed row]*

### (1.6) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

#### ISIN code - bond

#### (1.6.1) Does your organization use this unique identifier?

☑ No

#### ISIN code - equity

#### (1.6.1) Does your organization use this unique identifier?

☑ Yes

#### (1.6.2) Provide your unique identifier

*AU000000IPL1*

#### CUSIP number

#### (1.6.1) Does your organization use this unique identifier?

☑ No

### Ticker symbol

## (1.6.1) Does your organization use this unique identifier?

☑ Yes

## (1.6.2) Provide your unique identifier

*INCZY*

### SEDOL code

## (1.6.1) Does your organization use this unique identifier?

☑ No

### LEI number

## (1.6.1) Does your organization use this unique identifier?

☑ Yes

## (1.6.2) Provide your unique identifier

*254900UW2F3BKV6Z9V18*

### D-U-N-S number

## (1.6.1) Does your organization use this unique identifier?

☑ No

### Other unique identifier

## (1.6.1) Does your organization use this unique identifier?

☑ Yes

## (1.6.2) Provide your unique identifier

*ASX:IPL*

## (1.7) Select the countries/areas in which you operate.

*Select all that apply*

☑ Chile
☑ Canada
☑ France
☑ Mexico
☑ Turkey
☑ Australia
☑ United States of America

## (1.14) In which part of the chemicals value chain does your organization operate?

**Bulk inorganic chemicals**

☑ Ammonia
☑ Fertilizers
☑ Nitric acid
☑ Other industrial gases

**Other chemicals**

☑ Other, please specify: Ammonium nitrate

## (1.24) Has your organization mapped its value chain?

### (1.24.1) Value chain mapped

☑ Yes, we have mapped or are currently in the process of mapping our value chain

### (1.24.2) Value chain stages covered in mapping

*Select all that apply*

☑ Upstream value chain

☑ Downstream value chain

### (1.24.3) Highest supplier tier mapped

☑ Tier 3 suppliers

### (1.24.4) Highest supplier tier known but not mapped

☑ All supplier tiers known have been mapped

### (1.24.7) Description of mapping process and coverage

*IPL has partially mapped the upstream value chains of both Dyno Nobel and Incitec Pivot Fertilisers using supplier data. In some cases, this has included direct engagement with suppliers, and in some Australian cases, this has included obtaining enough information to map the supply chain back to cradle (raw material extraction). Where only supplier data such as location is currently known, IPL uses EcoInvent cradle-to-gate upstream GHG emissions factors (EF) based on location of manufacture. IPL has also mapped partially mapped the downstream value chains of both Dyno Nobel and Incitec Pivot Fertilisers. This is relatively simple in most cases, since our products are consumed during the use phase by our own mining and farming customers, hence we have used customer and market data.*

*GHG generated in the use phase are calculated using product composition for explosives (and assuming complete combustion following detonation) and Scope 3 NGER factors per tonne of applied nitrogen for fertiliser applications. Only a small percentage of total sales are made to industrial customers where further downstream mapping is required to establish product use. E.g., ammonia sold into the industrial market may be used as a refrigerant gas, for purification of water supplies, and in the manufacture of cleaning products, plastics, textiles, pesticides, dyes, etc. The value chains mapped for our Dyno Nobel and IPF businesses are represented graphically, along with the proportion of GHG in each sector of the value chain, in the 2023 IPL Climate Change Report.*

## (1.24.1) Have you mapped where in your direct operations or elsewhere in your value chain plastics are produced, commercialized, used, and/or disposed of?

### (1.24.1.1) Plastics mapping

*Select from:*

☑ Yes, we have mapped or are currently in the process of mapping plastics in our value chain

### (1.24.1.2) Value chain stages covered in mapping

*Select all that apply*

☑ Upstream value chain

☑ End-of-life management

### (1.24.1.4) End-of-life management pathways mapped

*Select all that apply*

☑ Recycling

☑ Landfill

## C2. Identification, assessment, and management of dependencies, impacts, risks, and opportunities

### (2.1) How does your organization define short-, medium-, and long-term time horizons in relation to the identification, assessment, and management of your environmental dependencies, impacts, risks, and opportunities?

### Short-term

**(2.1.1) From (years)**

*1*

**(2.1.3) To (years)**

*3*

**(2.1.4) How this time horizon is linked to strategic and/or financial planning**

*IPL has historically made use of a three-year commodity cycle to define 'short-term' in its financial reporting and planning. Short term risks are assessed annually and addressed in the ‘Principal Risks’ section of the IPL Annual Reports. 'Current' and 'Short Term*

### Medium-term

**(2.1.1) From (years)**

*4*

**(2.1.3) To (years)**

*6*

**(2.1.4) How this time horizon is linked to strategic and/or financial planning**

*Relates to two cycles of the three-year commodities cycle used in financial reporting and planning.*

### Long-term

## (2.1.1) From (years)

*7*

## (2.1.2) Is your long-term time horizon open ended?

☑ Yes

## (2.1.4) How this time horizon is linked to strategic and/or financial planning

*Relates to a timeframe beyond two cycles of the three-year commodities cycle used in financial reporting and planning.*

### (2.2) Does your organization have a process for identifying, assessing, and managing environmental dependencies and/or impacts?

| | Process in place | Dependencies and/or impacts evaluated in this process |
|---|---|---|
| | *Select from:*<br>☑ Yes | *Select from:*<br>☑ Both dependencies and impacts |

### (2.2.1) Does your organization have a process for identifying, assessing, and managing environmental risks and/or opportunities?

| | Process in place | Risks and/or opportunities evaluated in this process | Is this process informed by the dependencies and/or impacts process? |
|---|---|---|---|
| | ☑ Yes | ☑ Both risks and opportunities | ☑ Yes |

### (2.2.2) Provide details of your organization's process for identifying, assessing, and managing environmental dependencies, impacts, risks, and/or opportunities.

### Row 1

## (2.2.2.1) Environmental issue

*Select all that apply*

☑ Climate change

☑ Water

## (2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

*Select all that apply*

☑ Dependencies

☑ Impacts

☑ Risks

☑ Opportunities

## (2.2.2.3) Value chain stages covered

*Select all that apply*

☑ Direct operations

☑ Upstream value chain

☑ Downstream value chain

## (2.2.2.4) Coverage

*Select from:*

☑ Full

## (2.2.2.5) Supplier tiers covered

*Select all that apply*

☑ Tier 1 suppliers

☑ Tier 2 suppliers

☑ Tier 3 suppliers

## (2.2.2.7) Type of assessment

*Select from:*

☑ Qualitative and quantitative

## (2.2.2.8) Frequency of assessment

☑ Annually

## (2.2.2.9) Time horizons covered

☑ Short-term

☑ Medium-term

☑ Long-term

## (2.2.2.10) Integration of risk management process

☑ Integrated into multi-disciplinary organization-wide risk management process

## (2.2.2.11) Location-specificity used

☑ Site-specific
☑ Local
☑ Sub-national
☑ National

## (2.2.2.12) Tools and methods used

**Commercially/publicly available tools**

☑ IBAT for Business
☑ LEAP (Locate, Evaluate, Assess and Prepare) approach, TNFD
☑ TNFD – Taskforce on Nature-related Financial Disclosures
☑ WRI Aqueduct

**Enterprise Risk Management**

☑ Enterprise Risk Management

**International methodologies and standards**

☑ IPCC Climate Change Projections

**Databases**

☑ Regional government databases

**Other**

☑ Desk-based research
☑ External consultants
☑ Jurisdictional/landscape assessment
☑ Materiality assessment
☑ Scenario analysis

## (2.2.2.13) Risk types and criteria considered

**Acute physical**

☑ Drought
☑ Tornado
☑ Landslide
☑ Wildfires
☑ Heat waves
☑ Cold wave/frost
☑ Cyclones, hurricanes, typhoons
☑ Heavy precipitation (rain, hail, snow/ice)
☑ Flood (coastal, fluvial, pluvial, ground water)
☑ Storm (including blizzards, dust, and sandstorms)

**Chronic physical**

☑ Heat stress
☑ Water stress
☑ Sea level rise
☑ Coastal erosion
☑ Soil degradation
☑ Increased severity of extreme weather events
☑ Water availability at a basin/catchment level
☑ Seasonal supply variability/interannual variability
☑ Changing temperature (air, freshwater, marine water)
☑ Changing precipitation patterns and types (rain, hail, snow/ice)
☑ Changing wind patterns
☑ Temperature variability
☑ Increased ecosystem vulnerability
☑ Rationing of municipal water supply
☑ Precipitation or hydrological variability

**Policy**

☑ Carbon pricing mechanisms
☑ Increased pricing of water
☑ Changes to national legislation
☑ Poor coordination between regulatory bodies
☑ Increased difficulty in obtaining operations permits
☑ Changes to international law and bilateral agreements
☑ Increased difficulty in obtaining water withdrawals permit
☑ Statutory water withdrawal limits/changes to water allocation
☑ Uncertainty and/or conflicts involving land tenure rights and water rights

**Market**

☑ Availability and/or increased cost of raw materials
☑ Changing customer behaviour
☑ Uncertainty in the market signals
☑ Other market, please specify: Changes in demand for explosives from various mining markets (e.g. from coal mining to metals)

**Reputation**

☑ Impact on human health

☑ Increased partner and stakeholder concern and partner and stakeholder negative feedback

☑ Negative press coverage related to support of projects or activities with negative impacts on the environment (e.g. GHG emissions, deforestation & conversion, water stress)

☑ Stakeholder conflicts concerning water resources at a basin/catchment level

**Technology**

☑ Transition to bio-based chemicals

☑ Transition to lower emissions technology and products

☑ Unsuccessful investment in new technologies

**Liability**

☑ Exposure to litigation

☑ Non-compliance with regulations

☑ Other liability, please specify: Regional carbon pricing creates a competition risk

## (2.2.2.14) Partners and stakeholders considered

☑ NGOs
☑ Customers
☑ Employees
☑ Investors
☑ Suppliers
☑ Regulators
☑ Local communities
☑ Indigenous peoples
☑ Water utilities at a local level
☑ Other water users at the basin/catchment level

## (2.2.2.15) Has this process changed since the previous reporting year?

☑ Yes

## (2.2.2.16) Further details of process

*RCP 85 was used in IPLs 3oC Scenario to assess physical risks which may impact our own operations our suppliers logistics and customer demand for our products and services across each business unit It was also used to assess physical risks which may impact our 12 major manufacturing facilities and their suppliers logistics and customer demand at the facility level.*

*The following scenarios were used to assess risks and opportunities which may impact our own operations our suppliers logistics and customer demand for our products and services across each business unit:*

- *RCP 6.0 was used in IPLs Inevitable Policy Response IPR scenario to assess physical and transitional risks*
- *RCP 4.5 was used in IPLs 2oC scenario to assess physical and transitional risks*
- *RCP 2.6 was used in IPLs 15oC scenario to assess physical and transitional risks*
- *IEA SDS was used in IPLs 15oC 2oC and IPR scenarios*
- *The IEA NPS scenario was used in IPLs 15oC and 2oC scenarios to assess transitional risks*
- *The BNEF NEO was used in IPLs 15oC and 2oC scenarios to assess transitional risks*
- *Shared Socioeconomic Pathway 1 SSP1 Sustainability Taking the Green Road is a scenario of projected socioeconomic global changes up to 2100 which outlines a future in which there are low challenges to mitigation and adaptation SSP1 was used in creating IPLs bespoke 15oC scenario which was used to assess physical and transitional risks See httpswwwcarbonbrieforgexplainerhowsharedsocioeconomicpathwaysexplorefutureclimatechange*
- *Shared Socioeconomic Pathway 2 SSP2 Middle of the Road is a scenario of projected socioeconomic global changes up to 2100 which outlines a future in which there are a medium level of challenges to mitigation and adaptation. SSP2 was used in creating IPLs bespoke 2oC scenario which was used to assess physical and transitional risks See httpswwwcarbonbrieforgexplainerhowsharedsocioeconomicpathwaysexplorefutureclimatechange*
- *The UNPRI Inevitable Policy Response scenario was used by IPL to assess transitional risks which may impact our own operations our suppliers logistics and customer demand for our products and services across each business unit*
- *The Inevitable Policy Response IPR is a climate transition forecasting consortium commissioned by the Principles for Responsible Investment PRI an investor initiative in partnership with UNEP Finance Initiative and UN Global Compact which aims to prepare institutional investors for the portfolio risks and opportunities associated with a period of relatively little policy action followed by an acceleration of policy responses to the impacts of climate change. IPR forecasts a continued acceleration in climate policy to 2025 driven in part by the 2023 Paris Stocktake and the 2025 Ratchet IPR assesses that those policy responses will be increasingly forceful abrupt and disorderly with financial market and real economy uncertainties inherent in the climate transition See httpswwwunpriorgsustainabilityissuesclimatechangeinevitablepolicyresponse.*
- *A TNFD LEAP Assessment was also completed for our IPF business. It was designed as an initial study to identify the major risks and opportunities associated with IPFs impacts and dependencies on nature. It focused on IPFs operations and the use of our fertiliser products by our farming customers and included three locations for deep dive analysis. These were our SSP manufacturing site in Geelong, our Cairns Primary Distribution Centre and our Colonsay Research Farm, which was used as a proxy for customer farms.*

## (2.2.2.1) Environmental issue

☑ Climate change
☑ Water
☑ Biodiversity

## (2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

☑ Dependencies
☑ Impacts
☑ Risks
☑ Opportunities

## (2.2.2.3) Value chain stages covered

☑ Direct operations
☑ Downstream value chain

## (2.2.2.4) Coverage

☑ Partial

## (2.2.2.7) Type of assessment

☑ Qualitative only

## (2.2.2.8) Frequency of assessment

☑ Not defined

## (2.2.2.9) Time horizons covered

☑ Short-term

## (2.2.2.10) Integration of risk management process

☑ Integrated into multi-disciplinary organization-wide risk management process

## (2.2.2.11) Location-specificity used

☑ Site-specific
☑ Local
☑ Sub-national

## (2.2.2.12) Tools and methods used

**Commercially/publicly available tools**

☑ Encore tool
☑ WRI Aqueduct
☑ WWF Biodiversity Risk Filter
☑ IBAT – Integrated Biodiversity Assessment Tool
☑ TNFD – Taskforce on Nature-related Financial Disclosures
☑ LEAP (Locate, Evaluate, Assess and Prepare) approach, TNFD
☑ Other commercially/publicly available tools, please specify:

**ARIES Platform for SEEA Ecosystem Accounting Standard**

**Databases**

☑ Other databases, please specify:
World Wildlife Fund Biomes and Terrestrial Ecoregions of the World (TEWO) database;
World Database on Protected Areas;
International Union for Conservation of Nature (IUCN) Red List of Threatened Species;
Key Biodiversity Areas (KBAs) catalogue

**Other**

☑ External consultants

## (2.2.2.13) Risk types and criteria considered

**Acute physical**

☑ Drought
☑ Toxic spills
☑ Pollution incident
☑ Storm (including blizzards, dust, and sandstorms)
☑ Flood (coastal, fluvial, pluvial, ground water)
☑ Heavy precipitation (rain, hail, snow/ice)

**Chronic physical**

☑ Soil erosion
☑ Water stress
☑ Soil degradation
☑ Change in land-use
☑ Groundwater depletion
☑ Increased severity of extreme weather events
☑ Water availability at a basin/catchment level
☑ Increased levels of environmental pollutants in freshwater bodies
☑ Declining water quality
☑ Declining ecosystem services
☑ Increased ecosystem vulnerability
☑ Water quality at a basin/catchment level
☑ Precipitation or hydrological variability

**Policy**

☑ Introduction of regulatory standards for previously unregulated contaminants
☑ Limited or lack of river basin management
☑ Regulation of discharge quality/volumes

**Market**

☑ Changing customer behaviour

**Reputation**

☑ Increased partner and stakeholder concern and partner and stakeholder negative feedback
☑ Negative press coverage related to support of projects or activities with negative impacts on the environment (e.g. GHG emissions, deforestation & conversion, water stress)
☑ Stakeholder conflicts concerning water resources at a basin/catchment level
☑ Stigmatization of sector

**Technology**

☑ Transition to bio-based chemicals

☑ Other technology, please specify**:** Enhanced Efficiency Fertilisers (Nitrogen inhibited fertilisers)

**Liability**

☑ Exposure to litigation

☑ Non-compliance with regulations

## (2.2.2.14) Partners and stakeholders considered

☑ NGOs

☑ Customers

☑ Investors

☑ Regulators

☑ Local communities

☑ Indigenous peoples

☑ Water utilities at a local level

☑ Other water users at the basin/catchment level

☑ Other commodity users/producers at a local level

## (2.2.2.15) Has this process changed since the previous reporting year?

☑ Yes

## (2.2.2.16) Further details of process

*As a supplier to the agricultural sector, we understand that our customers interact directly with natural resources such as water and soils, and depend on natural systems such as the water cycle, nutrient cycles, and the atmospheric cycles which create our weather. These are required to grow the food and fibre, such as cotton, that are not only required to sustain our populations, but that our customers depend on for their livelihoods. The Taskforce on Nature-related Financial Disclosures (TNFD) aims to help businesses account for nature-related risks and opportunities in their decisions. For IPF, these decisions relate not only to the provision of products and services that help our customers improve soil health and reduce their environmental impacts, but also to our own operations. We recognise that these also depend on natural resources and can impact local environments.*

*In view of this, we conducted an initial TNFD LEAP1 assessment during 2023. Our LEAP Assessment was designed as an initial study to identify the major risks and opportunities associated with IPF's impacts and dependencies on nature. It focused on IPF's operations and the use of our fertiliser products by our farming customers. It included three locations for 'deep dive' analysis: our SSP manufacturing site in Geelong; our Cairns Distribution centre and our Colonsay Research Farm, which was used as a proxy for assessment of the impacts and dependencies of our 'downstream' farming customers and is representative of typical customer farms in that region.*

## (2.2.7) Are the interconnections between environmental dependencies, impacts, risks and/or opportunities assessed?

### (2.2.7.1) Interconnections between environmental dependencies, impacts, risks and/or opportunities assessed

☑ Yes

### (2.2.7.2) Description of how interconnections are assessed

*Interconnections were assessed according to the TCFD and TNFD assessment and reporting frameworks. This enabled the assessment of climate-related risks and opportunities in the context of our business' capital allocation framework, governance structures and business strategy. This allowed trade-offs to be identified, such as between managing competition and supply chain risks (for example, through sourcing from lowest cost supplier) and risks associated with environmental impacts (for example, higher scope 3 greenhouse gases associated with that supplier, or longer shipping routes). The risks, opportunities and impacts identified in our company wide TCFD scenario analyses and our IPF TNFD LEAP assessment were also cross referenced against existing risks in the IPL risk register to identify potential trade-offs, and also where climate change may be a cause contributing to the likelihood of existing risks occurring.*

*An example of an identified trade-off is the treatment of stormwater at the Geelong SSP site in order to reduce the likelihood of accidental releases of high nutrient water to the environment, as well as to reduce municipal water use volumes in the catchment, which is identified as being under increasing water stress. However, the treatment of the water uses electricity, contributing to higher scope 3 GHG and costs. Examples of climate change being a cause that is likely to contribute to existing risks include increased intensity of rainfall events contributing to the likelihood of dam overflows, and therefore accidental releases to the environment; and more extreme snowfall events causing increased load on rooftops, increasing the risk of structural collapse, injury or death, damage to equipment and interruption to production processes at one of our US sites.*

## (2.3) Have you identified priority locations across your value chain?

### (2.3.1) Identification of priority locations

☑ Yes, we have identified priority locations

### (2.3.2) Value chain stages where priority locations have been identified

☑ Direct operations

### (2.3.3) Types of priority locations identified

**Sensitive locations**

☑ Areas important for biodiversity

☑ Areas of limited water availability, flooding, and/or poor quality of water

☑ Areas of importance for ecosystem service provision

**Locations with substantive dependencies, impacts, risks, and/or opportunities**

☑ Locations with substantive dependencies, impacts, risks, and/or opportunities relating to water

☑ Locations with substantive dependencies, impacts, risks, and/or opportunities relating to biodiversity

☑ Other location with substantive nature-related dependencies, impacts, risks, and/or opportunities, please specify **:**IPL owned and operated ammonia manufacturing sites which rely on natural gas for both hydrogen feedstock and energy, as well as our nitric acid manufacturing sites. These are priority locations for investment in GHG reduction technologies.

## (2.3.4) Description of process to identify priority locations

*Priority locations were identified during our TCFD and TNFD aligned risk and opportunity assessments. Our TCFD assessment for our global businesses used future climate-related scenarios to identify risks and opportunities. These were rated against IPL's risk matrix, as per other risks, to prioritise based on financial materiality (a rating of 5-6 on a six point scale is considered material) with ratings from 2-6 used for impact materiality. For example, carbon pricing risk was quantified and found to be potentially financially material, while the GHG associated with our ammonia and nitric acid plants were found to have impact materiality in their contribution to climate change, as well as potential financial and reputational materiality.*

*Our TNFD LEAP assessment for the IPF business looked at where IPF's direct operations and related value chain activities were located. It then assessed priority locations for nature interface using the questions*

- *'Which biomes and ecosystems do IPF's activities interface with?'*
- *'What is the current integrity and importance of the ecosystems in each location?' and*
- *'At which locations does IPF's business interface with ecosystems assessed as being of low integrity, high biodiversity importance, and/or areas of water stress?'*

*This initial LEAP Assessment focused on IPF's sites, which are all located in Australia, with a single farm site being used as only broadly representative of typical farming customers. 27 IPF sites, including the Colonsay Research Farm, were identified as potentially having more substantial impacts on their local ecosystems, based on an assessment of their energy (electricity and natural gas) and water usage, and the tonnes of product being manufactured or distributed. These criteria were used as proxies to estimate each site's 'area of influence', a subjective measure of the size of a site's potential impact on local ecosystems. These were then subjected to a prioritisation assessment against the tools and data bases reported earlier in this report to develop an understanding of both the biomes and ecosystems that these sites interact with, and the integrity and importance of those biomes. Scoring criteria and thresholds were developed in consultation with the expert advisor engaged to conduct the assessment: potential impacts on identified ecosystems under stress, within a 50km radius.*

*Using this approach, seven sites were identified as having the greatest correlation with areas of high biodiversity (the number of species), critical habitats, protected areas and water stress, and were therefore identified as being of the highest priority assessment regarding potential impacts on low integrity, high biodiversity and water stressed areas. Three sites were then chosen for a 'deep-dive assessment in the Evaluate Phase. These were IPF's operations in Geelong and Cairns, with the Colonsay Research Farm used as a proxy for the impacts and dependencies associated with customer use of our fertiliser*

## (2.3.5) Will you be disclosing a list/spatial map of priority locations?

☑ Yes, we will be disclosing the list/geospatial map of priority locations

## (2.3.6) Provide a list and/or spatial map of priority locations

*CDP Upload 1_2.3.pdf. See* 2023-ipl-sustainability-report.pdf (incitecpivot.com.au)

## (2.4) How does your organization define substantive effects on your organization?

### Risks

## (2.4.1) Type of definition

☑ Qualitative

☑ Quantitative

## (2.4.2) Indicator used to define substantive effect

☑ EBITDA

## (2.4.3) Change to indicator

☑ Absolute decrease

## (2.4.5) Absolute increase/ decrease figure

*A$20,000,000*

## (2.4.6) Metrics considered in definition

☑ Time horizon over which the effect occurs

## (2.4.7) Application of definition

*IPL defines a ‘material’ financial risk as one which, if it materialised, would have an A$20m impact or greater on earnings before interest and taxes (EBIT) in any financial year period. Risks, opportunities and impacts on IPL (including climate-related risks, opportunities and impacts) are examined against consequence categories including Health and Safety, Environmental, Reputational and Financial impacts and rated using a 6 point scale, with 5-6 rating risks meeting this level of financial materiality. For impact risks and opportunities (i.e., those which could impact on people, communities and the environment) the lower materiality threshold of a rating of 2-6 was used.*

### Opportunities

## (2.4.1) Type of definition

☑ Qualitative

☑ Quantitative

## (2.4.2) Indicator used to define substantive effect

☑ EBITDA

## (2.4.3) Change to indicator

☑ Absolute increase

## (2.4.5) Absolute increase/ decrease figure

*A$20,000,000*

## (2.4.6) Metrics considered in definition

*Select all that apply*

☑ Time horizon over which the effect occurs

## (2.4.7) Application of definition

*IPL defines a 'material' financial opportunity as one which, if it materialised, would have an A$20m impact or greater on earnings before interest and taxes (EBIT) in any financial year period. Risks, opportunities and impacts on IPL (including climate-related risks, opportunities and impacts) are examined against consequence categories including Health and Safety, Environmental, Reputational and Financial impacts and rated using a 6 point scale, with 5-6 rating risks meeting this level of financial materiality. For impact risks and opportunities (i.e., those which could impact on people, communities and the environment) the lower materiality threshold of a rating of 2-6 was used.*

### (2.5) Does your organization identify and classify potential water pollutants associated with its activities that could have a detrimental impact on water ecosystems or human health?

## (2.5.1) Identification and classification of potential water pollutants

☑ Yes, we identify and classify our potential water pollutants

## (2.5.2) How potential water pollutants are identified and classified

*IPL operates under a Global Health, Safety and Environment (HSEC) Management System. Potential water pollutants are identified at each operational location as part of the comprehensive risk management process governed by the IPL HSEC Management System. Once identified, potential water pollutants are classified and managed using the information on Safety Data Sheets (SDS). This information includes ecotoxicity, persistence and degradability and environmental fate (exposure).*

*In certain jurisdictions, the Group holds licences for some of our operations and activities from the relevant environmental regulator. We measure our compliance with such licences and report statutory non-compliances as required. For example, in relation to water discharge, all of our USA manufacturing sites have individual permits which specify the contaminants and levels allowed for Drinking Water, NPDES Discharge to rivers; or Underground Injection. These individual discharge limitations are developed by the agencies using the Code of Federal Regulations (CFR), which contains limits according to business type and amount of production.*

### (2.5.1) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your activities.

### Row 1

## (2.5.1.1) Water pollutant category

☑ Nitrates

## (2.5.1.2) Description of water pollutant and potential impacts

*Ecotoxicity: Ammonium nitrate is of low toxicity to aquatic life. Spills may cause algal blooms in static waters.*
*Persistence and degradability: When released into the soil, ammonium nitrate is not expected to evaporate significantly, but is expected to leach into groundwater. In damp soil the ammonium ion, NH4, is adsorbed by the soil. When released into water, ammonium nitrate is expected to readily biodegrade; the nitrate ion, NO3-, is mobile in water. The nitrate ion is the predominant form of plant nutrition. It follows the natural nitrification/denitrification cycle to give nitrogen.*
*Environmental fate (exposure): Low toxicity to aquatic life. TLm 96 between 10 – 100 ppm. No effects on growth or feeding activities were observed in largemouth bass and channel catfish exposed to concentrations of 400 mg NO3-/L.*
*Acute Toxicity to Fish: 48 hr LC50 (Cyprinus carpio): 1·15 - 1·72 mg un-ionised NH3/L; 95 – 102 mg total NH3/L;96 hr LC50 (Chinook Salmon, rainbow trout, bluegill): 420 -1,360 mg NO3-/L; TLm (Tadpoles): 910 mg NH3/L.*
*Chronic Toxicity to Fish 7 day LC50 (Fingerling rainbow trout): 1,065 mg/L.*
*Acute Toxicity to Aquatic Invertebrates EC50 (Daphnia magna): 555 mg/L; 124·9 mg total NH3/L. Chronic Toxicity to Invertebrates Up to 7 days NOEC (Bullia digitalis): 300 mg/L.*
*Classification (Australia): CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIAGHS classifications: Serious Eye Damage / Eye Irritation: Category 2A*

## (2.5.1.3) Value chain stage

*Select all that apply*
☑ Direct operations
☑ Upstream value chain
☑ Downstream value chain

## (2.5.1.4) Actions and procedures to minimize adverse impacts

*Select all that apply*
☑ Water recycling
☑ Provision of best practice instructions on product use
☑ Requirement for suppliers to comply with regulatory requirements
☑ Industrial and chemical accidents prevention, preparedness, and response
☑ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements
☑ Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

## (2.5.1.5) Please explain

*Although of low toxicity to aquatic life, ammonium nitrate can cause algal bloom, and therefore potential eutrophication, in still waterways due to provision of nitrate ions, which are the predominant form of plant nutrition. Measures to prevent spillage, leaching and leakages include, but are not limited to: Dust suppression – wind breaks/covered/enclosed stockpiles, fabric filter/baghouses; On-site wastewater treatment plants; On site spill kits; Procedures for transportation; Supply of specialist knowledge in product use via our technical support teams and our Dyno Consult business. At many customer sites IPL employees handle the product as specialist contractors during use.*

### Row 2

## (2.5.1.1) Water pollutant category

☑ Inorganic pollutants

## (2.5.1.2) Description of water pollutant and potential impacts

***Nitric acid (aqueous HNO3 solution).*** *Nitric acid (HNO3) is highly soluble in water to form an aqueous HNO3 solution, a strong acid. Nitric acid is slightly toxic to aquatic organisms based on ecotoxicity testing. Nitric acid may decrease the pH of aquatic systems to less than pH 5 which may be toxic to aquatic species. The bioconcentration potential of nitric acid is low and its potential for mobility in soil is very high. Nitric acid will not biodegrade readily in the environment, but will ionize in water and be readily neutralized by the natural buffering capacity (alkalinity) present in the soil and surface water. The nitrate ion will ultimately become an inorganic nutrient for plant species.*
*Classification: Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS. This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.*
*Classification of the chemical: Corrosive to Metals - Category 1Skin Corrosion - Sub-category 1AEye Damage - Category 1*

## (2.5.1.3) Value chain stage

*Select all that apply*
☑ Direct operations

## (2.5.1.4) Actions and procedures to minimize adverse impacts

*Select all that apply*
☑ Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

☑ Industrial and chemical accidents prevention, preparedness, and response

☑ Water recycling

☑ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

## (2.5.1.5) Please explain

*Nitric acid is manufactured and used to make ammonium nitrate under strictly controlled conditions in the on-site manufacture of ammonium nitrate. Spills must be prevented due to the corrosive nature of the substance. Spills to waterways have the potential to lower the pH of the water, affecting aquatic life. The hazardous nature of nitric acid requires emergency and spill procedures to be effective to avoid both human and environmental exposure. Controls include:*
*• HSE management system is in place with clear principles and policies communicated to employees, including appropriate Personal Protective Equipment.*
*• HSE risk management strategies are employed at all times and across all sites. Incidents are reported and investigated, and learnings are shared throughout the Group.*
*• Management undertakes risk identification and mitigation strategies across all sites.*
*• IPL undertakes business continuity planning and incident preparedness across all sites.*
*• Wet scrubbers are used to control fume from storage tanks.*

### Row 3

## (2.5.1.1) Water pollutant category

☑ Phosphates

## (2.5.1.2) Description of water pollutant and potential impacts

*Urea contains nitrogen (outlined above). Ammonia based granulated fertilisers (ammonium phosphates) including diammonium phosphate and monoammonium phosphate fertilisers contain nitrogen (outlined above) and phosphorus, both of which can stimulate weed and algal growth if lost to static surface waterways. Algae affect water quality and taste. Depending on the concentration and species, ammonium may be toxic to fish. In the soil, ammonium is converted to nitrate. Nitrate is susceptible to leaching and may contaminate groundwater. High nitrate concentrations (above 10mg/L) may render water unsuitable for human and livestock consumption.*
*Classification (Australia): NOT CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA. No signal word, pictograms, hazard or precautionary statements have been allocated on the SDS.*

## (2.5.1.3) Value chain stage

*Select all that apply*

☑ Direct operations

☑ Upstream value chain

☑ Downstream value chain

## (2.5.1.4) Actions and procedures to minimize adverse impacts

☑ Water recycling

☑ Provision of best practice instructions on product use

☑ Requirement for suppliers to comply with regulatory requirements

☑ Industrial and chemical accidents prevention, preparedness, and response

☑ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

☑ Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

## (2.5.1.5) Please explain

*Although of low toxicity to aquatic life, the nutrients (nitrates and phosphates) in ammonia based fertilisers can cause algal bloom, and therefore potential eutrophication, in still waterways. It is therefore necessary to prevent/immediately clean up any spills to prevent their entry into waterways. Measures to prevent spillage, leaching and leakages include, but are not limited to:*
*• Dust suppression – wind breaks/covered/enclosed stockpiles, fabric filter/baghouses*
*• Wastewater treatment plants*
*• Road sweepers and wheel washes to prevent any product leaving the site.*
*• IPL promotes the Fertcare principles and code of practice for responsible fertiliser use, a joint initiative between Fertilizer Australia Inc. and the Australian Fertiliser Services Association, to our customers.*

### Row 4

## (2.5.1.1) Water pollutant category

☑ Inorganic pollutants

## (2.5.1.2) Description of water pollutant and potential impacts

***Sulphuric acid** (aqueous H2SO4 solution). Sulphuric acid is miscible with water and its dilution will increase the velocity of downward movement in the soil where it may dissolve the soil material. Sulphuric acid is harmful to aquatic life in very low concentrations. It has moderate acute (short-term) toxicity on aquatic life and has moderate chronic (long-term) toxicity to aquatic life. Small quantities of sulfuric acid will be neutralised by the natural alkalinity in aquatic systems however, larger quantities may lower the pH for extended periods of time.*
*Classification (Australia: CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA*
*GHS classification(s): Skin Corrosion/Irritation: Category 1A*

## (2.5.1.3) Value chain stage

☑ Direct operations

☑ Upstream value chain

## (2.5.1.4) Actions and procedures to minimize adverse impacts

☑ Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

☑ Industrial and chemical accidents prevention, preparedness, and response

☑ Requirement for suppliers to comply with regulatory requirements

☑ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

## (2.5.1.5) Please explain

*Sulphuric acid is used under strictly controlled conditions in the on-site manufacture of ammonium phosphate fertilisers. Spills must be prevented due to the corrosive nature of the substance. Spills to waterways have the potential to lower the pH of the water, affecting aquatic life. The hazardous nature of sulphuric acid requires emergency and spill procedures to be effective to avoid both human and environmental exposure. Controls include:*

*• HSE management system is in place with clear principles and policies communicated to employees, including appropriate Personal Protective Equipment.*

*• HSE risk management strategies are employed at all times and across all sites. Incidents are reported and investigated, and learnings are shared throughout the Group.*

*• Management undertakes risk identification and mitigation strategies across all sites.*

*• IPL undertakes business continuity planning and incident preparedness across all sites.*

*• Wet scrubbers are used to control fume from storage tanks.*

### Row 5

## (2.5.1.1) Water pollutant category

☑ Inorganic pollutants

## (2.5.1.2) Description of water pollutant and potential impacts

***Anhydrous ammonia** is very toxic to aquatic organisms. In low concentrations in water and soil, ammonia acts as a fertiliser to promote plant growth. Free ammonia concentrations of 2·5 mg per litre at pH 7·4 to 8·5 are considered harmful to marine life. In water ammonia (NH3) is considered to be the primary toxic form while the more prevalent ammonium hydroxide (NH4OH) form is much less harmful. Increases in pH above 7·5 will lead to an increased level of non-ionised ammonia (NH3).*

*Ammonia is readily oxidized to nitrite which is also toxic to marine life. In water, ammonia volatilizes to the atmosphere, is transformed to other nitrogenous compounds, or may be bound to materials in the water.*
*Environmental fate (exposure): 48 hr LC50 (daphnia magna): 24 mg/L;48 hr LC50, S (daphnia magna):189 mg/L;24 hr LC50 (rainbow trout): fertilised egg: 3·58 mg/L; alevins (0-50 days old): 3·58 mg/L; fry (85 days old): 0·068 mg/L; adults: 0·097 mg/L.*
*Classification: Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS. This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.*
*Classification of the chemical: Flammable Gases - Category 2Gases under pressure - Liquefied Gas Acute Inhalation Toxicity - Category 3Skin Corrosion - Sub-category 1BEye Damage - Category 1Specific target organ toxicity (single exposure) - Category 3Acute Aquatic Toxicity - Category 1*

## (2.5.1.3) Value chain stage

☑ Direct operations

☑ Upstream value chain

☑ Downstream value chain

## (2.5.1.4) Actions and procedures to minimize adverse impacts

☑ Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

☑ Industrial and chemical accidents prevention, preparedness, and response

☑ Provision of best practice instructions on product use

☑ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

☑ Other, please specify **:**Alarms on storage tanks to detect vapour leaks

## (2.5.1.5) Please explain

*One volume of liquid anhydrous ammonia released from a container at 15ºC will dissipate into approximately 850 volumes of gaseous ammonia. However, liquid anhydrous ammonia may take considerable time to evaporate due to its latent heat of evaporation. The hazardous nature of anhydrous ammonia requires emergency and spill procedures to be effective to avoid both human and environmental exposure*
*.• HSE management system is in place with clear principles and policies communicated to employees*
*• HSE risk management strategies are employed at all times and across all sites. Incidents are reported and investigated, and learnings are shared throughout the Group.*
*• Management undertakes risk identification and mitigation strategies across all sites.*
*• IPL undertakes business continuity planning and incident preparedness across all sites.*
*• The Group has strict processes around the stewardship, movement and safe handling of dangerous goods and other chemicals.*
*• Supply of Safety Data Sheets, which comply with GHS Classification and Labelling of Chemicals and meet the requirements of the Australian Dangerous Goods Code and Safe Work Australia criteria.*

*• Purpose-built gas detectors are permanently located near the perimeters of sites that have anhydrous ammonia storage tanks, ensuring that any potential leaks can be responded to. The detectors set off an alarm to response teams at any time of the day or night if gas is detected.*

### Row 6

## (2.5.1.1) Water pollutant category

☑ Inorganic pollutants

## (2.5.1.2) Description of water pollutant and potential impacts

***Sodium hydroxide*** *(Cooling water treatment). Toxic for aquatic organisms. Harmful effect due to pH shift.*
*Classification (Australia): CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA.*
*Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS. HAZARDOUS CHEMICAL.*
*Corrosive to Metals - Category 1Skin Corrosion - Sub-category 1AEye Damage - Category 1GHS classification: Corrosive to Metals: Category 1Skin Corrosion/Irritation: Category 1A*

## (2.5.1.3) Value chain stage

☑ Direct operations

☑ Upstream value chain

## (2.5.1.4) Actions and procedures to minimize adverse impacts

☑ Industrial and chemical accidents prevention, preparedness, and response

## (2.5.1.5) Please explain

*Used as an onsite cooling water treatment, sodium hydroxide is very toxic to aquatic life. The corrosive nature of sodium hydroxide requires handling procedures to be effective to avoid human and environmental exposure.*
*• HSE management system is in place with clear principles and policies communicated to employees, including appropriate Personal Protective Equipment.*
*• HSE risk management strategies are employed at all times and across all sites. Incidents are reported and investigated, and learnings are shared throughout the Group.*
*• Management undertakes risk identification and mitigation strategies across all sites.*
*• IPL undertakes business continuity planning and incident preparedness across all sites.*

## Row 7

### (2.5.1.1) Water pollutant category

☑ Phosphates

### (2.5.1.2) Description of water pollutant and potential impacts

***Single super phosphate (SSP) fertilisers*** *(granulated) contain phosphorus. Phosphates are not toxic to people or animals unless they are present in very high levels. Although of low toxicity to aquatic life, single superphosphate fertilisers can cause algal bloom, and therefore potential eutrophication, in still waterways due to provision of phosphates, which are a form of plant nutrition.*
*Ecotoxicity: 48 hour LC50 (bluegill): 10 mg/L*
*Persistence/Degradability: Not expected to persist in the environment.*
*Classification (Australia): NOT CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA. No signal word, pictograms, hazard or precautionary statements have been allocated on the SDS.*

### (2.5.1.3) Value chain stage

☑ Direct operations

☑ Downstream value chain

### (2.5.1.4) Actions and procedures to minimize adverse impacts

☑ Industrial and chemical accidents prevention, preparedness, and response

☑ Provision of best practice instructions on product use

☑ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

### (2.5.1.5) Please explain

*Although of low toxicity to aquatic life, single superphosphate fertilisers can cause algal bloom, and therefore potential eutrophication, in still waterways due to provision of phosphates, which are a form of plant nutrition. It is therefore necessary to prevent/immediately clean up any spills to prevent their entry into waterways.*
*Measures to prevent spillage, leaching and leakages include, but are not limited to:*
*• Dust suppression – wind breaks/covered/enclosed stockpiles, fabric filter/baghouses*
*• Wastewater treatment plants, road sweepers and wheel washes to prevent any product leaving the site.*
*• IPF promotes the Fertcare principles and code of practice for responsible fertiliser use, a joint initiative between Fertilizer Australia Inc. and the Australian Fertiliser Services Association, to our customers.*

## Row 8

### (2.5.1.1) Water pollutant category

☑ Inorganic pollutants

### (2.5.1.2) Description of water pollutant and potential impacts

***Sodium hypochlorite*** *(Cooling water treatment). Acute aquatic toxicity (Category 1). Very toxic to aquatic life. LC50 (fish) - 0.07-5.9 mg/l –48h.*
*Classification (Australia); CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA.*
*Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS. HAZARDOUS CHEMICAL.*
*Classification of the chemical: Skin Corrosion - Sub-category 1BEye Damage - Category 1Acute Aquatic Toxicity - Category 1GHS Classification: Corrosive to metals (Category 1). Skin corrosion (Sub-category 1C). Eye damage (Category 1).*

### (2.5.1.3) Value chain stage

☑ Direct operations

☑ Upstream value chain

### (2.5.1.4) Actions and procedures to minimize adverse impacts

☑ Industrial and chemical accidents prevention, preparedness, and response

### (2.5.1.5) Please explain

*Used as an onsite cooling water treatment, sodium hypochlorite is very toxic to aquatic life. The corrosive nature of sodium hypochlorite requires handling procedures to be effective to avoid human or environmental exposure.*
*• HSE management system is in place with clear principles and policies communicated to employees, including appropriate Personal Protective Equipment.*
*• HSE risk management strategies are employed at all times and across all sites. Incidents are reported and investigated, and learnings are shared throughout the Group.*
*• Management undertakes risk identification and mitigation strategies across all sites.*
*• IPL undertakes business continuity planning and incident preparedness across all sites.*

## C3. Disclosure of risks and opportunities

### (3.1) Have you identified any environmental risks which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?

### Climate change

#### (3.1.1) Environmental risks identified

☑ Yes, both in direct operations and upstream/downstream value chain

### Water

#### (3.1.1) Environmental risks identified

☑ Yes, both in direct operations and upstream/downstream value chain

### Plastics

#### (3.1.1) Environmental risks identified

☑ Yes, only in our upstream/downstream value chain

#### (3.1.2) Primary reason why your organization does not consider itself to have environmental risks in your direct operations and/or upstream/downstream value chain

☑ Other, please specify: We sell a proportion of our products in woven polypropylene packaging (downstream) which we purchase from WPP bag supplier (Upstream)

#### (3.1.3) Please explain

*We sell a proportion of our products in woven polypropylene packaging (downstream) which we purchase from WPP bag supplier (Upstream)*

## (3.1.1) Provide details of the environmental risks identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.

### Climate change

### (3.1.1.1) Risk identifier

☑ Risk1

### (3.1.1.3) Risk types and primary environmental risk driver

**Acute physical**

☑ Flooding (coastal, fluvial, pluvial, groundwater)

### (3.1.1.4) Value chain stage where the risk occurs

☑ Direct operations

### (3.1.1.6) Country/area where the risk occurs

☑ Australia

### (3.1.1.9) Organization-specific description of risk

*Our Phosphate Hill ammonium phosphate manufacturing site is located in remote northern Australia (near a natural phosphate deposit). While the site itself is not located in a flood zone, a single third-party-operated rail line, which occasionally floods during the wet season, is used for supply in, and product transport out, of site. The incidence & intensity of flood events is described as increasing in the short term (1-3 years) under all future climate-related scenarios, even the 1.5ºC scenario. Under the 2ºC, 3ºC+ and IPR scenarios, insurance premiums are described increasing along with a possibility that some events may be excluded from cover.*

*Interruptions to the rail line can result in financial loss if product cannot be transferred off-site, resulting in production losses once site storage has reached capacity. In 2016, flood waters caused a derailment of sulphuric acid supply to the site, resulting in an A$10m impact on EBIT. In 2019, a one-in-one-hundred-year flooding event damaged third-party rail infrastructure, interrupting rail services to the site for 3 months (early Feb to early May 2019). This outage required a temporary emergency change from rail to road transport of product for the three months. Production also halted once product storage was at capacity, and several plant trips were experienced during restarting. This resulted in a period of almost three months in which production was interrupted. The total EBIT impact of the event at that time was A$115m.*

## (3.1.1.11) Primary financial effect of the risk

☑ Disruption to sales

## (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

☑ Short-term

## (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

☑ More likely than not

## (3.1.1.14) Magnitude

☑ Medium

## (3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

*Following the one-in-one-hundred-year flooding event at Phosphate Hill in 2019, a detailed review of contingency plans for rail interruptions at the site was completed. As a result, additional on-site and contingency storage was built, a dry truck unloading chute/conveyor and telehandler are hired for the wet season, and a number of other process changes were implemented which have allowed IPL to better prepare for, manage and mitigate the risks associated with rail interruptions, both minor and major. In association with the risk review, an internal audit was conducted by KPMG which identified further minor improvements to contingency plans and resulted in an overall rating of 'satisfactory'. These learnings and contingency plans have reduced the potential financial impact of future similar events. As a result, the expected financial impact of a similar future event at this site is expected to be A$30m (using commodities prices the same as those in the 2019 event).*

## (3.1.1.17) Are you able to quantify the financial effect of the risk?

☑ Yes

## (3.1.1.19) Anticipated financial effect figure in the short-term – minimum (currency)

*A$30,000,000*

## (3.1.1.20) Anticipated financial effect figure in the short-term – maximum (currency)

*A$30,000,000*

## (3.1.1.25) Explanation of financial effect figure

*The A$115m impact of the 2019 one-in-one-hundred-year flooding event, before the development of comprehensive contingency plans and CAPEX spend to increase site storage, was as follows:*
*A$95m implied lost sales margin*
*A$13m loss from manufacturing plant inefficiencies (sulphur, gas, electricity, sulphuric acid, take or pay agreements)*
*A$2m to set up temporary alternative rail loading facility beyond flood damaged zone*
*A$3m road freight to alternative rail loading facility*
*+ 2 other one off costs = 115m.*

*(Note: No costs were incurred by IPL in repairing the damaged rail infrastructure because the rail line is owned and operated by a third-party. No IPL operations were damaged by the flood).*

*Learnings and contingency plans which have been developed as a result of this event have reduced the potential financial impact of future similar events. Product storage capacity at the site has been increased and lessons learned during the event have informed contingency planning for future events. As a result, the expected financial impact of a similar future event at this site is expected to be A$30m (using commodities prices the same as those in the 2019 event).*

## (3.1.1.26) Primary response to risk

**Infrastructure, technology and spending**

☑ Other infrastructure, technology and spending, please specify **:**Increase in site storage capacity for supplies and finished product; contingency plans for future rail line interruptions (to road); increased monitoring of weather with key decisions assigned for identified triggers.

## (3.1.1.27) Cost of response to risk

*A$3,820,000*

## (3.1.1.28) Explanation of cost calculation

*The case study described at 'Description of response' has been used to arrive at the cost of response figure reported as follows:*
*A$3.6m installation of increased product storage to avoid plant shutdowns in the event that rail transport must be transferred to road (which is slower)*
*A$220,000 over the wet period to hire a dry truck unloading chute/ conveyor and telehandler for the wet season in case it is required.*

## (3.1.1.29) Description of response

*Following the one-in-one-hundred-year flooding event at Phosphate Hill in 2019, a detailed review of contingency plans for rail interruptions at the site was completed. As a result, additional on-site and contingency storage was built, a dry truck unloading chute/conveyor and telehandler were hired for the 2021 wet season and a number of other process changes were implemented which will allow IPL to better prepare for, manage and mitigate the risks associated with future rail interruptions, both minor and major. In association with the risk review, an internal audit was conducted by KPMG which identified further minor improvements to contingency plans and resulted in an overall rating of 'satisfactory'. This Case Study has been used to arrive at the cost of response figure reported above as described at "Explanation of cost calculation.*

### Water

## (3.1.1.1) Risk identifier

☑ Risk5

## (3.1.1.3) Risk types and primary environmental risk driver

**Acute physical**

☑ Flooding (coastal, fluvial, pluvial, groundwater)

## (3.1.1.4) Value chain stage where the risk occurs

☑ Direct operations

## (3.1.1.6) Country/area where the risk occurs

☑ Australia

## (3.1.1.7) River basin where the risk occurs

☑ Eyre Lake

## (3.1.1.9) Organization-specific description of risk

*Our Phosphate Hill ammonium phosphate manufacturing site is located in remote northern Australia (near a natural phosphate deposit). While the site itself is not located in a flood zone, a single third-party-operated rail line, which occasionally floods during the wet season, is used for supply in, and product transport out, of site. The incidence & intensity of flood events is described as increasing in the short term (1-3 years) under all future climate-related scenarios, even the 1.5oC scenario. Under the 2oC, 3oC and IPR scenarios, insurance premiums are described increasing along with a possibility that some events may be excluded from cover. Interruptions to the rail line can result in financial loss if product cannot be transferred off-site, resulting in production losses once site storage has reached capacity. In 2016, flood waters caused a derailment of sulphuric acid supply to the site, resulting in a A10m impact on EBIT. In 2019, a one-in-one-hundred-year flooding event damaged third-party rail infrastructure, interrupting rail services to the site for 3 months (early Feb to early May 2019). This outage required a temporary emergency change from rail to road transport of product for the three months. Production also halted once product storage was at capacity, and several plant trips were experienced during restarting. This resulted in a period of almost three months in which production was interrupted. The total EBIT impact of the event at that time was A$115m.*

## (3.1.1.11) Primary financial effect of the risk

☑ Disruption to sales

## (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

☑ Short-term

## (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

☑ More likely than not

## (3.1.1.14) Magnitude

☑ Medium

## (3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

*Following the one-in-one-hundred-year flooding event at Phosphate Hill in 2019, a detailed review of contingency plans for rail interruptions at the site was completed. As a result, additional on-site and contingency storage was built, a dry truck unloading chute/conveyor and telehandler are hired for the wet season, and a number of other process changes were implemented which will allow IPL to better prepare for, manage and mitigate the risks associated with future rail interruptions, both minor and major. In association with the risk review, an internal audit was conducted by KPMG which identified further minor improvements to contingency plans and resulted in an overall rating of 'satisfactory'. These learnings and contingency plans have reduced the potential financial impact of future similar events. As a result, the expected financial impact of a similar future event at this site is expected to be A$30m (using commodities prices the same as those in the 2019 event).*

## (3.1.1.17) Are you able to quantify the financial effect of the risk?

☑ Yes

## (3.1.1.19) Anticipated financial effect figure in the short-term – minimum (currency)

*A$30,000,000*

## (3.1.1.20) Anticipated financial effect figure in the short-term – maximum (currency)

*A$30,000,000*

## (3.1.1.25) Explanation of financial effect figure

*The A$115m impact of the 2019 one-in-one-hundred-year flooding event, before the development of comprehensive contingency plans and CAPEX spend to increase site storage, was as follows:*
*A$95m implied lost sales margin*
*A$13m loss from manufacturing plant inefficiencies (sulphur, gas, electricity, sulphuric acid, take or pay agreements)*
*A$2m to set up temporary alternative rail loading facility beyond flood damaged zone*
*A$3m road freight to alternative rail loading facility*
*+ 2 other one off costs = 115m.*

*(Note: No costs were incurred by IPL in repairing the damaged rail infrastructure because the rail line is owned and operated by a third-party. No IPL operations were damaged by the flood).*

*Learnings and contingency plans which have been developed as a result of this event have reduced the potential financial impact of future similar events. Product storage capacity at the site has been increased and lessons learned during the event have informed contingency planning for future events. As a result, the expected financial impact of a similar future event at this site is expected to be A$30m (using commodities prices the same as those in the 2019 event).*

## (3.1.1.26) Primary response to risk

**Infrastructure, technology and spending**

☑ Other infrastructure, technology and spending, please specify**:** Increase in site storage capacity for supplies and finished product; contingency plans for future rail line interruptions (to road); increased monitoring of weather with key decisions assigned for identified triggers.

## (3.1.1.27) Cost of response to risk

*A$3,820,000*

## (3.1.1.28) Explanation of cost calculation

*The case study described at 'Description of response' has been used to arrive at the cost of response figure reported as follows:*
*A$3.6m installation of increased product storage to avoid plant shutdowns in the event that rail transport must be transferred to road (which is slower)*
*A$220,000 over the wet period to hire a dry truck unloading chute/ conveyor and telehandler for the wet season in case it is required.*

## (3.1.1.29) Description of response

*Following the one-in-one-hundred-year flooding event at Phosphate Hill in 2019, a detailed review of contingency plans for rail interruptions at the site was completed. As a result, additional on-site and contingency storage was built, a dry truck unloading chute/conveyor and telehandler were hired for the 2021 wet season and a number of other process changes were implemented which will allow IPL to better prepare for, manage and mitigate the risks associated with future rail interruptions, both minor and major. In association with the risk review, an internal audit was conducted by KPMG which identified further minor improvements to contingency plans and resulted in an overall rating of 'satisfactory'. This Case Study has been used to arrive at the cost of response figure reported above as described at ''Explanation of cost calculation.*

# Plastics

## (3.1.1.1) Risk identifier

☑ Risk1

## (3.1.1.3) Risk types and primary environmental risk driver

**Reputation**

☑ Other reputation risk, please specify**:** Product stewardship / reputational risk related to inadequate or incorrect disposal/non-recycling of woven polypropylene (WPP - a plastic) fertiliser bags with IPF branding by customers.

## (3.1.1.4) Value chain stage where the risk occurs

☑ Downstream value chain

## (3.1.1.6) Country/area where the risk occurs

☑ Australia

## (3.1.1.9) Organization-specific description of risk

*While 85% of our fertilisers are sold in bulk with no packaging, 15% is sold in WPP fertiliser bags. There is a reputational risk to our fertiliser business, IPF, of farming customers incorrectly disposing of one tonne and small pack WPP fertiliser bags in appropriately which may lead to fertiliser bags with IPF branding being left in the environment, being burned on farm or being disposed into landfill rather than being recycled.*

## (3.1.1.11) Primary financial effect of the risk

☑ Brand damage

## (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

☑ Short-term

## (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

☑ Unlikely

## (3.1.1.14) Magnitude

☑ Low

## (3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

*IPF has reduced the reputational risks associated with IPF branded fertiliser bags being lost to the environment from customer farms, being burned or being landfilled through its bag collection and recycling program. This began in 2015 when we supported a trial fertiliser bag recycling program, the Sugarcane Fertiliser Bag Recovery Trial, partnering with packaging suppliers, recycling companies, councils and government departments to reduce farm waste. The successful trial resulted in the development of the Farm Waste Recovery program, which transitioned into the Big Bag Recovery program in 2021 – an Australian Government accredited product stewardship scheme – to recycle and recover our fertiliser bags. To divert these bags from landfill, we encourage customers to return them to us, or drop them at the nearest Big Bag Recovery collection point. Participation in the program allowed Big Bag Recovery to recover 310,000 kilograms of waste farm plastic* *from our customers in the reporting period The IPL 2023 financial year). Recycling this packaging waste also avoided an estimated 440 tCO2e in GHG and around 2,250 in landfill costs. Due to this program, we anticipate the much lower likelihood of this risk being realised, and a very low financial impact on IPL if it were to occur.*

## (3.1.1.29) Description of response

*IPF has reduced the reputational risks associated with IPF branded fertiliser bags being lost to the environment from customer farms, being burned or being landfilled through its bag collection and recycling program. This began in 2015 when we supported a trial fertiliser bag recycling program, the Sugarcane Fertiliser Bag Recovery Trial, partnering with packaging suppliers, recycling companies, councils and government departments to reduce farm waste. The successful trial resulted in the development of the Farm Waste Recovery program, which transitioned into the Big Bag Recovery program in 2021 – an Australian Government accredited product stewardship scheme – to recycle and recover our fertiliser bags.*

*To divert these bags from landfill, we encourage customers to return them to us, or drop them at the nearest Big Bag Recovery collection point. Participation in the program allowed Big Bag Recovery to recover 310,000 kilograms of waste farm plastic from our customers in the reporting period The IPL 2023 financial year). Recycling this packaging waste also avoided an estimated 440 tCO2e in GHG and around 2,250 in landfill costs. Due to this program, we anticipate the much lower likelihood of this risk being realised, and a very low financial impact on IPL if it were to occur.*

### Climate change

## (3.1.1.1) Risk identifier

☑ Risk2

## (3.1.1.3) Risk types and primary environmental risk driver

**Acute physical**

☑ Drought

## (3.1.1.4) Value chain stage where the risk occurs

☑ Downstream value chain

## (3.1.1.6) Country/area where the risk occurs

☑ Australia

## (3.1.1.9) Organization-specific description of risk

*IPL provides fertiliser products and services to farming customers who may be increasingly impacted by drought (or flood) due to climate change. Such changes are expected in the short term in all scenarios, with more extreme impacts described in the 2oC, 3oC and IPR scenarios in the medium to long term. For example, scenarios describe the south of Australia as becoming hotter and drier due to climate change, and IPL supplies 60-70% of the fertiliser market in this region. Much of eastern Australia experienced severe drought conditions during 2018-19. These conditions impacted on IPL's fertiliser sales volumes and mix, with the impact on EBIT calculated and publicly reported as 33.6 million in the 2019 IPL Annual Report.*

## (3.1.1.11) Primary financial effect of the risk

☑ Decreased revenues due to reduced demand for products and services

## (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

☑ Short-term

## (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

☑ About as likely as not

## (3.1.1.14) Magnitude

☑ Medium-low

## (3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

*IPL's earnings from fertiliser sales will continue to be dependent on global fertiliser prices, the A$:US$ exchange rate and weather conditions, and IPF includes seasonal weather forecasts in its earnings forecasts. For example, in late 2023, the Australian Bureau of Meteorology (BOM) announced that "Oceanic indicators firmly exhibit an El Niño state" – therefore expectations are for reduced 2024 spring rainfall in Eastern Australia, which may lead to lower demand for fertiliser in the region and potentially impact the overall market size.*

*Historically, cycles of drought (and flooding) in Australia are related to El Nino and La Nina cycles, with fertiliser sales impacted in long periods of drought. In the event that periods of drought across south-eastern Australia become more frequent or longer in duration, the impact would be more frequent or longer periods of time in which fertilisers sales in that region were impacted, impacting on revenues.*

*IPF sells into a wide diversity of geographies and agricultural markets, from the north of Australia at Cairns, all the way south to Victoria and then west into South Australia, providing earnings from other regions and markets.*

## (3.1.1.17) Are you able to quantify the financial effect of the risk?

☑ Yes

## (3.1.1.19) Anticipated financial effect figure in the short-term – minimum (currency)

*A$20,000,000*

## (3.1.1.20) Anticipated financial effect figure in the short-term – maximum (currency)

*A$40,000,000*

## (3.1.1.25) Explanation of financial effect figure

*This figure is based upon reported annual impacts on EBIT associated with previous drought and flooding events impacting on IPL's customer markets. The range was arrived at using the past actual reported impacts below:*
*• A$33.6m impact of prevailing drought conditions in Northern Victoria, New South Wales and Southern Queensland adversely impacted fertilisers sales volumes and mix (revenues) in early 2019*
*• A$19.8 non-material impact on distribution earnings which were adversely impacted by sales mix in 2018 due to drought conditions in NSW and Southern Queensland dampening nitrogen demand for winter crop application in these regions. The impact of dry weather was somewhat mitigated by higher global Urea prices, higher sales volumes in non-drought affected regions and higher distribution margins, demonstrating the advantage of geographical, market and product diversity.*
*• A non-material impact on EBIT due to drought in Northern Australia which negatively impacted fertiliser sales (revenues), primarily lower BigN sales into the Northern NSW and Queensland cotton markets, due to drought conditions in those regions.*

## (3.1.1.26) Primary response to risk

**Diversification**

☑ Develop new products, services and/or markets

## (3.1.1.27) Cost of response to risk

*A$5,000,000*

## (3.1.1.28) Explanation of cost calculation

*The 'cost of 'response' reported here is the annual R&D investment into the development of fertilisers for a warming climate. Zero is included for the other mitigating actions reported here because the S&OP process and our geographic diversity requires no additional investment.*

## (3.1.1.29) Description of response

*(1) The S&OP process incorporates forecasting which enables upcoming seasonal scenario planning and some supply flexibility. Forecasts are based on typical weather conditions and are reviewed on an ongoing basis as the seasons progress to help align supply to changing demand.*

*(2) Geographic and market diversity (fertiliser): IPL's Australian fertilisers business operates in all Australian States other than Western Australia. In addition to geographical diversity, there is also diversity across crops – IPL supplies fertilisers for a wide range of agricultural applications – and customers serviced. For example, in 2018 distribution earnings were adversely impacted by sales mix due to drought conditions (in NSW and Southern Queensland) dampening nitrogen demand for winter crop application in these regions. The impact of dry weather was somewhat mitigated by higher global Urea prices, higher sales volumes in non-drought affected regions and higher distribution margins, demonstrating the advantage of geographical, market and product diversity.*

*(3) Geographic and market diversity (explosives): IPL's explosives business, Dyno Nobel, operates across North America, the Asia Pacific, and in Europe, and is primarily aligned to customers with tier 1 assets, being those with the most efficient operations and best resources. Also, there is diversity in customer base, with products and services supplied for iron ore, base and precious metals, quarry and construction, and thermal and MET coal customers.*

*(4) IPF continues the development and testing of a range of new fertilisers, some of which have been shown to increase heat stress resistance in crops. The 'cost of 'response' reported here is the annual R&D investment into the development of fertilisers for a warming climate. Zero is included for the other mitigating actions reported here because the S&OP process and our geographic diversity requires no additional investment.*

### Climate change

## (3.1.1.1) Risk identifier

☑ Risk3

## (3.1.1.3) Risk types and primary environmental risk driver

**Policy**

☑ Carbon pricing mechanisms

## (3.1.1.4) Value chain stage where the risk occurs

☑ Direct operations

### (3.1.1.6) Country/area where the risk occurs

☑ Australia

☑ United States of America

### (3.1.1.9) Organization-specific description of risk

*Carbon pricing could result in cost increases for IPL's manufacturing facilities in Australia and the US; alternatively, regulatory changes may potentially impact the ability of facilities to continue functioning as currently operated. The risk would be heightened if regulations are implemented inconsistently across regions or countries so that the manufacturing facilities of competitors in other jurisdictions are less impacted.*

*E.g. (1) The Safeguard Mechanism currently exists in Australia and applied to three of our major manufacturing sites in 2023, covering over 95% of our total Australian Scope 1 emissions, which were 1.2m tCO2e in 2023. The 1.5ºC scenario described rapid introduction of a global carbon price reaching US$300/t CO2e by 2030 and US$550/t CO2e by 2040, with a global price of US$50-100 in the short-term (1-3 years). In this scenario, carbon pricing would increase operational costs as well as costs to transport products until 2025, when the scenario describes most transport options being retrofitted with zero or low carbon mobility options. The transition to a global carbon price may give rise to a period of volatility where IPL would not be able to pass through costs to customers, who may choose to source products more locally where available to avoid the costs.*
*E.g. (2) US State of Oregon has introduced a Carbon Reduction Scheme: the impact on IPL's St Helens facility could be up to 10m annually, depending on carbon reductions achieved in the state.*

### (3.1.1.11) Primary financial effect of the risk

☑ Increased compliance costs

### (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

☑ Short-term

### (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

☑ Very likely

### (3.1.1.14) Magnitude

☑ Medium

## (3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

*(1) IPL's Australian scope 1 emissions were 1.2m tCO2e in 2023. If a A$50 carbon price was applied to 5% of these emissions under the Safeguard Mechanism the impact would be A$3m (60,000 tCO2e x 50 = 3m). If a A$50 carbon price was applied to all of these emissions the impact would be A$60m (1,200,000 tCO2e x 50 60m)*

*(2) IPL's global scope 1 emissions were 3,595,407 tCO2e in 2023. If a A$50 carbon price was applied to all of these emissions the impact would be A$180m (3,595,407 tCO2e x 50 = 179.8m)*

*(3) A global US$100 carbon price would result in an impact of 3,595,407 x 100  US$359m. However, a global carbon price (rather than carbon pricing emerging in some jurisdictions and not others) would mean that such a cost impost could be passed on to customers and would not result in IPL being disadvantaged unless competitors produced products with lower emissions intensities than IPL.*

## (3.1.1.17) Are you able to quantify the financial effect of the risk?

☑ Yes

## (3.1.1.19) Anticipated financial effect figure in the short-term – minimum (currency)

*60,000*

## (3.1.1.20) Anticipated financial effect figure in the short-term – maximum (currency)

*60,000,000*

## (3.1.1.25) Explanation of financial effect figure

*(1) IPL's Australian scope 1 emissions were 1.2m tCO2e in 2023. If a A$50 carbon price was applied to 5% of these emissions under the Safeguard Mechanism the impact would be A$3m (60,000 tCO2e x 50 =3m). If a A$50 carbon price was applied to all of these emissions the impact would be A$60m (1,200,000 tCO2e x 50 =60m)*
*(2) IPL's global scope 1 emissions were 3,595,407 tCO2e in 2023. If a A$50 carbon price was applied to all of these emissions the impact would be A$180m (3,595,407 tCO2e x 50 = 179.8m)*
*(3) A global US100 carbon price would result in an impact of 3,595,407 x 100 = US$359m. However, a global carbon price (rather than carbon pricing emerging in some jurisdictions and not others) would mean that such a cost impost could be passed on to customers and would not result in IPL being disadvantaged unless competitors produced products with lower emissions intensities than IPL.*

## (3.1.1.26) Primary response to risk

**Policies and plans**

☑ Develop a climate transition plan

## (3.1.1.27) Cost of response to risk

*171,550,000*

## (3.1.1.28) Explanation of cost calculation

*The reported cost of response to risk includes the following:*
*A$750,000 in specialist roles related to carbon pricing management and the development of IPL's Net Zero Pathway.*
*A$800,000 in DETSC funding allocated to manage decarbonisation pathway projects*
*A$50,000,000 in approved Capex*
*A$100-130m in aggregate to 2030 for decarbonisation projects, which is 'Sustainability Capital', and part of the first order capital allocation 'No cost' risk management actions and resilience aspects include:*
*• IPL has a large, diverse supplier group, which would assist in avoiding carbon pricing pass through in the short-term.*
*• IPL customer agreements provide for the pass through of carbon pricing where possible.*
*• Domestic co-location of critical products will reduce carbon costs associated with transport.*
*• Diversification away from single source suppliers, already being managed, will also assist in managing the potentially volatile/variable costs associated with increased regulation.*

## (3.1.1.29) Description of response

*To manage this risk, the CEO formed the IPL Decarbonisation and Energy Transition (DET) Steering Committee, and chaired it in the reporting year, to develop and oversee the Company's Net Zero Pathway and reduce exposure to carbon pricing risks. The DET Steering Committee comprises selected executives including the CFO, the Chief Technology Development Officer and the President Global Manufacturing and HSE, and management including the VP Strategic Project Development and the Sustainability Manager. The DETSC has identified projects at IPL's manufacturing sites to achieve IPL's 5% absolute reduction target by 2025, and a 42% reduction by 2030, both against a 2020 baseline.*

- *The first of these, a A$20m Moranbah Tertiary N2O Abatement installation, was completed in March 2024 (after the end of this year's CDP reporting period). This will reduce IPL's global scope 1 GHG by 7% by 2025 and the Moranbah facility's GHG by around a third.*
- *A second N2O abatement project at Louisiana, Missouri ammonium nitrate facility has been approved for installation in 2025 and will reduce IPL's global GHG by a further 19%.*
- *The Gibson Island Green Ammonia project would reduce IPL's global GHG by a further 17%.*

*To track the development of carbon pricing schemes which may impact IPL, the IPL Corporate Sustainability Manager chairs the Carbon Pricing Steering Committee (CPSC). The CPSC comprises manufacturing, strategy, finance, treasury & energy contract management personnel across our global sites. The CPSC, through the*

*Sustainability Manager and VP Strategic Projects, continually monitors emerging carbon pricing developments & informs the Decarbonisation & Energy Transition Steering Committee and the Board of relevant compliance requirements and market opportunities. For example, the emerging carbon cap and trade regulation in Oregon, and the Safeguard Mechanism changes in Australia, are currently being tracked by the CPSC.*

## Climate change

### (3.1.1.1) Risk identifier

☑ Risk4

### (3.1.1.3) Risk types and primary environmental risk driver

**Market**

☑ Changing customer behaviour

### (3.1.1.4) Value chain stage where the risk occurs

☑ Downstream value chain

### (3.1.1.6) Country/area where the risk occurs

☑ United States of America

### (3.1.1.9) Organization-specific description of risk

*Transition away from thermal coal mining to new world metals and copper mining impacts revenue mix and sources: IPL's 1.5ºC and 2ºC scenarios describe a transition away from fossil fuels, which would significantly decrease demand for thermal coal, with impacts beginning in the short term (1-3 years). IPL supplies explosives to the thermal coal mining sector in the Powder River Basin in the US. Revenues from supply to this market have been reducing for several years and made up 12% of Dyno Nobel America's revenue and 4.7% of IPL's total global revenue in this reporting period, the IPL FY23. Continued reduction in demand for thermal coal would reduce IPL's revenues from this sector.*

*However, the 1.5ºC and 2ºC scenarios also describe technologies associated with renewable energy, such as electric vehicles and largescale batteries, as likely to expand dramatically, with World Bank estimates indicating that demand for the metals required for these technologies could grow by 1000% under a 2ºC scenario.*

## (3.1.1.11) Primary financial effect of the risk

☑ Change in revenue mix and sources

## (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

☑ The risk has already had a substantive effect on our organization in the reporting year

## (3.1.1.14) Magnitude

☑ Low

## (3.1.1.15) Effect of the risk on the financial position, financial performance and cash flows of the organization in the reporting year

*IPL's major exposure to thermal coal is supplying the Powder River Basin (PRB), North America's most competitive thermal coal mining region, with ammonium nitrate (AN) explosives manufactured at our Cheyenne, Wyoming plant (which is located adjacent to the PRB) and some imported AN. This sector made up 12% of Dyno Nobel America's revenue, and 4.7% of IPL's global revenues in 2023.*

*Since the Cheyenne site is also well positioned to service the Base & Precious Metals mining sector in Canada and Western US, the decline in revenues from thermal coal mining in the PRB has been managed to date through expanding revenues into the Base & Precious Metals and Quarry & Construction sectors, which made up 26% and 22% of IPL's Americas revenues in 2023. In addition, the Cheyenne site captures carbon dioxide created from the production of ammonia to use in the manufacture of urea and is also increasing the production of a urea-based Diesel Exhaust Fluid (DEF) product which is used to mitigate NOx emissions in diesel vehicles, providing an alternative income stream for this facility.*

*The 'Cost of response' figure reported here is the estimated A$30m CAPEX cost to expand into the DEF urea market.*

## (3.1.1.17) Are you able to quantify the financial effect of the risk?

☑ Yes

## (3.1.1.18) Financial effect figure in the reporting year (currency)

*0*

## (3.1.1.25) Explanation of financial effect figure

*IPL's major exposure to thermal coal is supplying the Powder River Basin (PRB), North America’s most competitive thermal coal mining region, with ammonium nitrate (AN) explosives manufactured at our Cheyenne, Wyoming plant (which is located adjacent to the PRB) and some imported AN. This sector made up 12% of Dyno Nobel America’s revenue, and 4.7% of IPL's global revenues in 2023.*

*Since the Cheyenne site is also well positioned to service the Base & Precious Metals mining sector in Canada and Western US, the decline in revenues from thermal coal mining in the PRB has been managed to date through expanding revenues into the Base & Precious Metals and Quarry & Construction sectors, which made up 26% and 22% of IPL's Americas revenues in 2023. In addition, the Cheyenne site captures carbon dioxide created from the production of ammonia to use in the manufacture of urea and is also increasing the production of a urea-based Diesel Exhaust Fluid (DEF) product which is used to mitigate NOx emissions in diesel vehicles, providing an alternative income stream for this facility.*

*The 'Cost of response' figure reported here is the estimated A$30m CAPEX cost to expand into the DEF urea market.*

## (3.1.1.26) Primary response to risk

**Diversification**

☑ Other diversification, please specify**:** Shift from thermal coal mining customer markets to metals and quarry & construction mining customer markets.

## (3.1.1.27) Cost of response to risk

*30,000,000*

## (3.1.1.28) Explanation of cost calculation

*The 'Cost of response' figure reported here is the estimated A$30m CAPEX cost to expand into the DEF urea market*

## (3.1.1.29) Description of response

*IPL's major exposure to thermal coal is supplying the Powder River Basin (PRB), North America’s most competitive thermal coal mining region, with ammonium nitrate (AN) explosives manufactured at our Cheyenne, Wyoming plant (which is located adjacent to the PRB) and some imported AN. This sector made up 12% of Dyno Nobel America’s revenue, and 4.7% of IPL's global revenues in 2023. Since the Cheyenne site is also well positioned to service the Base & Precious Metals mining sector in Canada and Western US, the decline in revenues from thermal coal mining in the PRB has been managed to date through expanding revenues into the Base & Precious Metals and Quarry & Construction sectors, which made up 26% and 22% of IPL's Americas revenues in 2023. In addition, the Cheyenne site captures carbon dioxide created from the production of ammonia to use in the manufacture of urea and is also increasing the production of a urea-based Diesel Exhaust Fluid (DEF) product which is used to mitigate NOx emissions in diesel vehicles, providing an alternative income stream for this facility.*

## Water

### (3.1.1.1) Risk identifier

☑ Risk6

### (3.1.1.3) Risk types and primary environmental risk driver

**Acute physical**

☑ Drought

### (3.1.1.4) Value chain stage where the risk occurs

*Select from:*

☑ Direct operations

### (3.1.1.6) Country/area where the risk occurs

☑ Australia

### (3.1.1.7) River basin where the risk occurs

☑ Other, please specify

### (3.1.1.9) Organization-specific description of risk

*Water is a key raw material for manufacturing at some IPL manufacturing sites, with the majority used for cooling purposes. The IPR, 2ºC and 3+ºC climate change scenarios describe reduced average annual rainfall and longer periods of prolonged drought across south-eastern Australia, with increased variability also impacting the northern half of Australia, indicating water restrictions may become more frequent in some areas. These impacts could occur in the short-term (1-3 years), with very low dam levels being recorded near some sites in the last decade. Two sites which may be affected in Queensland, Australia are the Mt Isa sulphuric acid manufacturing plant and the Gibson Island ammonia manufacturing plant. (The Phosphate Hill site is supplied by a groundwater source. The Geelong SSP plant is also likely in a catchment likely to experience increasing baseline water stress, however, impacts to EBIT would not be financially material.) The Gibson Island site is in the Brisbane River Catchment. A partnership with FFI to convert this plant from natural gas to electrolysis of water (using renewable electricity) for green ammonia production is approaching Final Investment Decision stage. The WRI Aqueduct Water Tool identifies this site's catchment as currently subject to high (40-80%)*

*baseline water stress, high 'Physical risk - Quantity' due to a relatively large local population and high inter-annual variability in rainfall, with baseline water stress predicted to double by 2030.*

## (3.1.1.11) Primary financial effect of the risk

☑ Disruption in production capacity

## (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

☑ Short-term

## (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

☑ About as likely as not

## (3.1.1.14) Magnitude

☑ Medium-low

## (3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

*Modelling showed that A$7m impact on EBIT would result from a three-week outage at the Gibson Island ammonia manufacturing site due to water shortages. This site ceased natural gas based manufacturing during the reporting period, after exhaustive efforts were unable to secure an affordable long-term gas supply from Australian gas producers. However, plans to convert the site to green ammonia production are still under consideration.*

## (3.1.1.17) Are you able to quantify the financial effect of the risk?

☑ Yes

## (3.1.1.19) Anticipated financial effect figure in the short-term – minimum (currency)

*0*

## (3.1.1.20) Anticipated financial effect figure in the short-term – maximum (currency)

*7,000,000*

## (3.1.1.25) Explanation of financial effect figure

*Modelling showed that A$7m impact on EBIT would result from a three-week outage at the Gibson Island ammonia manufacturing site due to water shortages. This site ceased natural gas based manufacturing during the reporting period after exhaustive efforts were unable to secure an affordable long-term gas supply from Australian gas producers. However, plans to convert the site to green ammonia production are still under consideration.*

## (3.1.1.26) Primary response to risk

**Infrastructure, technology and spending**

☑ Adopt water efficiency, water reuse, recycling and conservation practices

## (3.1.1.27) Cost of response to risk

*A$4,000,000*

## (3.1.1.28) Explanation of cost calculation

*The 'cost of response' provided is the A$4m total project cost to lay a pipeline from a water recycling plant to the Gibson Island plant and connect it to site.*

## (3.1.1.29) Description of response

*IPL worked with Seqwater, the Queensland Government Bulk Water Supply Authority, and Urban Utilities, who operate a water recycling plant located near the Gibson Island site, to enable the purchase of recycled water. During 2021 we completed construction of a pipeline to bring around 6,000 kL per day of recycled water to the site. This will ensure an uninterrupted supply if municipal water supplies become restricted, and a recycled water supply for the production of green ammonia should the Gibson Island Green Ammonia conversion project pass Final Investment Decision. (A similar project is under consideration at Geelong).*

**(3.2) Within each river basin, how many facilities are exposed to substantive effects of water-related risks, and what percentage of your total number of facilities does this represent?**

### Row 1

### (3.2.1) Country/Area & River basin

**Australia**

☑ Eyre Lake

### (3.2.2) Value chain stages where facilities at risk have been identified in this river basin

☑ Direct operations

### (3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

*1*

### (3.2.4) % of your organization’s total facilities within direct operations exposed to water-related risk in this river basin

☑ 1-25%

### (3.2.10) % organization’s total global revenue that could be affected

☑ 1-10%

### (3.2.11) Please explain

*See Risk 1*

### Row 2

### (3.2.1) Country/Area & River basin

**Australia**

☑ Other, please specify: Brisbane River Catchment

## (3.2.2) Value chain stages where facilities at risk have been identified in this river basin

☑ Direct operations

## (3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

*1*

## (3.2.4) % of your organization’s total facilities within direct operations exposed to water-related risk in this river basin

☑ 1-25%

## (3.2.10) % organization’s total global revenue that could be affected

☑ 1-10%

## (3.2.11) Please explain

*See risk 5*

## (3.3) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?

### (3.3.1) Water-related regulatory violations

☑ Yes

### (3.3.2) Fines, enforcement orders, and/or other penalties

☑ Fines
☑ Enforcement orders or other penalties

### (3.3.3) Comment

*Our IPF business received two penalty infringement notices in 2023 from the Queensland DES, amounting to A$28,750, for two separate incidents at our Phosphate Hill site which each involved a loss of containment of contaminated water from pipes to ground in one instance, and to ground and a dry creek bed in the second instance. We identified these incidents during regular inspections of the pipe networks and duly reported them to the regulator. Remediation actions included the removal of contaminated soil, replacement with clean soil and the replacement of pipe joints.*

*We also negotiated an Enforceable Undertaking with the DES to resolve legacy contamination of soil, groundwater and stormwater at the Gibson Island site, including commitments to further investigate, monitor and develop programs to improve the condition of the site.*

*In the US, our Dyno Nobel business received a US$4,788 fine for the release of reverse osmosis water without a permit in place.*

## (3.3.1) Provide the total number and financial value of all water-related fines.

### (3.3.1.1) Total number of fines

*3*

### (3.3.1.2) Total value of fines

*A$36,052*

## (3.3.1.3) % of total facilities/operations associated

*2*

## (3.3.1.4) Number of fines compared to previous reporting year

☑ About the same

## (3.3.1.5) Comment

*There were also three minor water related fines in 2022.*

### (3.3.2) Provide details for all significant fines, enforcement orders and/or other penalties for water-related regulatory violations in the reporting year, and your plans for resolving them.

### Row 1

## (3.3.2.1) Type of penalty

☑ Fine

## (3.3.2.2) Financial impact

*$28,750*

## (3.3.2.3) Country/Area & River basin

**Australia**

☑ Eyre Lake

## (3.3.2.4) Type of incident

☑ Spillage, leakage or discharge of potential water pollutant

## (3.3.2.5) Description of penalty, incident, regulatory violation, significance, and resolution

*We received two penalty infringement notices in 2023 from the Queensland Department of Environment and Science (DES) amounting to A$28,750. These fines concern two separate incidents at our Phosphate Hill site which each involved a loss of containment of contaminated water from pipes to ground in one instance, and to ground and a dry creek bed in the second instance. We identified these incidents during regular inspections of the pipe networks and duly reported them to the regulator. Remediation actions included the removal of contaminated soil, replacement with clean soil and the replacement of pipe joints. In addition, a review of the governance of pipe networks between plants was conducted to clearly define the appropriate department responsible for these within the site.*

### Row 2

## (3.3.2.1) Type of penalty

☑ Enforcement order

## (3.3.2.2) Financial impact

*0*

## (3.3.2.3) Country/Area & River basin

**Australia**

☑ Other, please specify: Brisbane River Catchment

## (3.3.2.4) Type of incident

*Select from:*

☑ Other, please specify: Resolve legacy contamination of groundwater

## (3.3.2.5) Description of penalty, incident, regulatory violation, significance, and resolution

*During the reporting period, we engaged with the Queensland Department of Environment and Science (DES) to resolve legacy contamination of soil and groundwater at our Gibson Island manufacturing site, which has been operating since 1969. An Enforceable Undertaking, which contains commitments to further investigate, monitor and develop programs to improve the condition of the site, was negotiated with the DES. We also agreed to fund research at the University of Queensland into the recovery of phosphorus from water and donated to a local catchment management group. Since the agreement, we have invested in a A$13m wastewater treatment plant that will process groundwater at the site to remove legacy contaminants.*

## Row 3

### (3.3.2.1) Type of penalty

☑ Fine

### (3.3.2.2) Financial impact

*A$7,302*

### (3.3.2.3) Country/Area & River basin

**United States of America**

☑ St. Lawrence

### (3.3.2.4) Type of incident

☑ Other, please specify: Release of treated water without a permit

### (3.3.2.5) Description of penalty, incident, regulatory violation, significance, and resolution

*In the US, Dyno Nobel received a US$4,788 fine for the release of clean, treated reverse osmosis water without a permit in place. This was an administrative error and was rectified through obtaining a new permit to include the discharge of this clean, treated water from the RO.*

### (3.5) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

☑ Yes

### (3.5.1) Select the carbon pricing regulation(s) which impact your operations.

☑ Australia ERF Safeguard Mechanism - ETS
☑ Oregon ETS

### (3.5.2) Provide details of each Emissions Trading Scheme (ETS) your organization is regulated by.

**Australia ERF Safeguard Mechanism - ETS**

**(3.5.2.1) % of Scope 1 emissions covered by the ETS**

*34.4%*

**(3.5.2.2) % of Scope 2 emissions covered by the ETS**

*0*

**(3.5.2.3) Period start date**

*06/30/2022*

**(3.5.2.4) Period end date**

*06/29/2023*

**(3.5.2.5) Allowances allocated**

*0*

**(3.5.2.6) Allowances purchased**

*0*

## (3.5.2.7) Verified Scope 1 emissions in metric tons CO2e

*1,332,393*

## (3.5.2.8) Verified Scope 2 emissions in metric tons CO2e

*53,273*

## (3.5.2.9) Details of ownership

*Select from:*

☑ Facilities we own and operate

## (3.5.2.10) Comment

*Please note that the Australian ERF Safeguard Mechanism year (NGER year) is a June year end, while the rest of the reporting in this document is an IPL Financial year end ending 30 September. For this reason, the figures reported for the 2023 NGER year (as reported in this question) and the 2023 IPF FY will not align.*

### Oregon ETS

## (3.5.2.1) % of Scope 1 emissions covered by the ETS

*0.02%*

## (3.5.2.2) % of Scope 2 emissions covered by the ETS

*0*

## (3.5.2.3) Period start date

*12/31/2022*

## (3.5.2.4) Period end date

*12/30/2023*

## (3.5.2.5) Allowances allocated

*0*

## (3.5.2.6) Allowances purchased

*0*

## (3.5.2.7) Verified Scope 1 emissions in metric tons CO2e

*68,474*

## (3.5.2.8) Verified Scope 2 emissions in metric tons CO2e

*0*

## (3.5.2.9) Details of ownership

☑ Facilities we own and operate

## (3.5.2.10) Comment

*There were no costs associated with this ETS in the reporting period as the rules are still being finalised. The ETS applies to the CO2e arising from the natural gas combusted for energy at our St Helen's Oregon site, which are Scope 1 GHG only. These were verified. There are no verified Scope 2 GHG because the scheme does not apply to Scope 2 GHG.*

## (3.6) Have you identified any environmental opportunities which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?

| | Environmental opportunities identified |
|---|---|
| Climate change | *Select from:*<br>☑ Yes, we have identified opportunities, and some/all are being realized |
| Water | *Select from:*<br>☑ Yes, we have identified opportunities, and some/all are being realized |

*[Fixed row]*

## (3.6.1) Provide details of the environmental opportunities identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.

### Climate change

### (3.6.1.1) Opportunity identifier

☑ Opp1

### (3.6.1.3) Opportunity type and primary environmental opportunity driver

**Products and services**

☑ Increased sales of existing products and services

### (3.6.1.4) Value chain stage where the opportunity occurs

☑ Direct operations

## (3.6.1.5) Country/area where the opportunity occurs

☑ Australia

## (3.6.1.8) Organization specific description

*In our fertilisers business, IPF's Enhanced Efficiency Fertiliser (EEF) range, which includes nitrification inhibitors, has been shown to reduce our farming customers' GHG from fertiliser use by up to 76%. EEFs work by keeping nitrogen in stable forms in the soil for longer, optimising their uptake by plants and reducing the risk of nutrient run-off and losses to the air as $N_2O$. This year IPF participated in an industry association review to submit a method to formally quantify the GHG reductions associated with EEFs. We have also continued research partnerships to develop the next generation of enhanced efficiency 'smart fertilisers'.*

## (3.6.1.9) Primary financial effect of the opportunity

☑ Increased revenue resulting from price premiums

## (3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

☑ Short-term

☑ The opportunity has already had a substantive effect on our organization in the reporting year

## (3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

☑ More likely than not (50–100%)

## (3.6.1.12) Magnitude

☑ Medium

## (3.6.1.13) Effect of the opportunity on the financial position, financial performance and cash flows of the organization in the reporting period

*EFF products not only reduce nitrogen losses to the atmosphere as N2O (a GHG), but they also facilitate greater uptake of nitrogen to the crop, enabling higher yields for growers. Revenues from sales of EEFs continue to slowly increase, with A$17.6m in 2020, A$20.1m in 2021, A$27.8m in 2022 and A$33.5m in 2023. Should GHG reporting be extended to the agriculture sector in Australia, or a method developed to quantify the reductions which would allow users to earn ACCUs (carbon credits), it is likely that sales would increase exponentially.*

## (3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

*Increased revenue resulting from price premiums.*

## (3.6.1.15) Are you able to quantify the financial effects of the opportunity?

☑ Yes

## (3.6.1.16) Financial effect figure in the reporting year (currency)

*A$33,500,000*

## (3.6.1.17) Anticipated financial effect figure in the short-term - minimum (currency)

*A$30,000,000*

## (3.6.1.18) Anticipated financial effect figure in the short-term – maximum (currency)

*A$30,000,000*

## (3.6.1.23) Explanation of financial effect figures

*A$33.5m is the revenue from EEF sales in Australia in 2023 and cannot be broken down any further. The 'potential financial impact' reported is the revenue increase that would result if 20% of fertiliser sales (tonnes sold) in 2020 were replaced with premium EEFs (high efficiency low GHG release) fertiliser sales. (EBIT is not reported here due to issues related to commerciality in confidence).*

## (3.6.1.24) Cost to realize opportunity

*A$10,000,000*

## (3.6.1.25) Explanation of cost calculation

*The 'cost to realise opportunity' figure is the cost of CAPEX to build an additional product coating facility to switch 20% of our fertiliser sales to EEFs, which is A$10m. This entire amount was CAPEX spent on coating facilities and cannot be broken down any further.*

## (3.6.1.26) Strategy to realize opportunity

*Our Enhanced Efficiency Fertiliser (EEF) range (Green Urea, Entec products and eNpower) are products specially formulated to retain nutrients in more stable forms for longer periods, reducing the likelihood of volatilisation losses to the atmosphere as GHG and to waterways through leaching. EFF products not only reduce nitrogen losses to the environment, but they also facilitate greater uptake of nitrogen to the crop, enabling higher yields for growers. The greatest uptake of these products has been by sugarcane farmers near the Great Barrier Reef, as they seek to reduce the measurable levels of nitrogen in run-off from their farms to rivers that lead to the sea near the reef, indicating that measurement and regulation is a key consideration for farmers in the adoption of new products.*

*IPF's strategy to promote the benefits of these products in order to increase sales is twofold: firstly, to continue to collaborate with researchers for more independent studies which prove the increased yields and reduced GHG emissions associated with their use and secondly, to work with regulators to develop a recognised methodology to quantify the reductions in GHG on a tonne for tonne basis with uninhibited products, in order that the on-fam customer GHG reductions are measurable. Once this is the case, it is likely that carbon credits could be generated for their use, providing a further initiative for their adoption.*

### Water

## (3.6.1.1) Opportunity identifier

☑ Opp2

## (3.6.1.3) Opportunity type and primary environmental opportunity driver

**Products and services**

☑ Increased sales of existing products and services

## (3.6.1.4) Value chain stage where the opportunity occurs

☑ Downstream value chain

## (3.6.1.5) Country/area where the opportunity occurs

☑ Australia

## (3.6.1.6) River basin where the opportunity occurs

☑ Other, please specify

## (3.6.1.8) Organization specific description

*Our Enhanced Efficiency Fertiliser (EEF) range (Green Urea, Entec products and eNpower) are products specially formulated to retain nutrients in more stable forms for longer periods, reducing the likelihood of volatilisation losses to the atmosphere as GHG and to waterways through leaching. EFF products not only reduce nitrogen losses to the environment, but they also facilitate greater uptake of nitrogen to the crop, enabling higher yields for growers. The greatest uptake of these products has been by sugarcane farmers near the Great Barrier Reef, as they seek to reduce the measurable levels of nitrogen in run-off from their farms to rivers that lead to the sea near the reef, indicating that measurement and regulation is a key consideration for farmers in the adoption of new products.*

## (3.6.1.9) Primary financial effect of the opportunity

☑ Increased revenue resulting from price premiums

## (3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

☑ Short-term

☑ The opportunity has already had a substantive effect on our organization in the reporting year

## (3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

☑ More likely than not (50–100%)

## (3.6.1.12) Magnitude

☑ Medium

## (3.6.1.13) Effect of the opportunity on the financial position, financial performance and cash flows of the organization in the reporting period

*EFF products not only reduce nitrogen losses to the atmosphere as N2O (a GHG), they also reduce the likelihood of nitrogen losses to groundwater and waterways through keeping nitrogen in the stable, plant available form in the soil for longer. For this reason, the greatest uptake of EEFs has been in the sugarcane farming region near the great Barrier Reef, where the management of nitrogen run off to waterways is measured. Due to less nitrogen losses as GHG and to waterways, there is greater uptake of applied nitrogen by the crop, enabling higher yields for growers on less cleared land. Revenues from sales of EEFs continue to slowly increase, with A$17.6m in 2020, A$20.1m in 2021, A$27.8m in 2022 and A$33.5m in 2023.*

## (3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

*Increased revenue resulting from price premiums.*

## (3.6.1.15) Are you able to quantify the financial effects of the opportunity?

☑ Yes

## (3.6.1.16) Financial effect figure in the reporting year (currency)

*A$33,500,000*

## (3.6.1.17) Anticipated financial effect figure in the short-term - minimum (currency)

*A$30,000,000*

## (3.6.1.18) Anticipated financial effect figure in the short-term – maximum (currency)

*A$30,000,000*

## (3.6.1.23) Explanation of financial effect figures

*A$33.5m is the revenue from EEF sales in Australia in 2023 and cannot be broken down any further. The 'potential financial impact' reported is the revenue increase that would result if 20% of fertiliser sales (tonnes sold) in 2020 were replaced with premium EEFs (high efficiency low GHG release) fertiliser sales. (EBIT and margins are not reported here due to issues related to commerciality in confidence).*

## (3.6.1.24) Cost to realize opportunity

*A$10,000,000*

## (3.6.1.25) Explanation of cost calculation

*The 'cost to realise opportunity' figure is the cost of CAPEX to build an additional product coating facility to switch 20% of our fertiliser sales to EEFs, which is A$10m*

## (3.6.1.26) Strategy to realize opportunity

*In addition to the strategy outline for EEF sales in Opportunity 1 above, IPF is committed to increasing awareness and education regarding the sustainable application of nutrients such as nitrogen, as required for the particular soil and crop, so as not to apply an excess of nutrients which results in losses to the environment. To assist grower, we introduced our Soil Health Test Package which enables analysis of the interactions between the biological, chemical and physical elements of the soil at a particular location and how they impact soil health at that farm. By understanding the differences in interactions, farmers can make targeted improvements to their under-performing areas and increase productivity and sustainability. Our soil health test package interprets the results and provides recommendations on how to improve those areas. This enables a more advanced understanding and management of paddocks, allowing farmers to adapt fertiliser application as soil characteristics change across a field. The result is application of the right product at the right place to achieve maximum yields while reducing the total amount of fertiliser applied, reducing the potential for nutrient losses to the environment.*

# Climate change

## (3.6.1.1) Opportunity identifier

☑ Opp3

## (3.6.1.3) Opportunity type and primary environmental opportunity driver

**Markets**

☑ Expansion into new markets

## (3.6.1.4) Value chain stage where the opportunity occurs

☑ Downstream value chain

## (3.6.1.5) Country/area where the opportunity occurs

☑ Peru
☑ Chile
☑ Brazil
☑ Canada
☑ Australia
☑ Indonesia

## (3.6.1.8) Organization specific description

*New world metals and copper market growth*

## (3.6.1.9) Primary financial effect of the opportunity

☑ Increased revenues through access to new and emerging markets

## (3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

☑ Short-term

## (3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

☑ Likely (66–100%)

## (3.6.1.12) Magnitude

☑ Medium-high

## (3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

*IPL's scenario analyses, as well as market forecasts, indicate a shrinking thermal coal market and growing metals markets globally. Strategic action has been taken by Dyno Nobel Americas to shift operations and supply into emerging new world mineral markets in both South America and western USA, and increase revenues from the quarry and construction sector.*

## (3.6.1.15) Are you able to quantify the financial effects of the opportunity?

☑ No

## (3.6.1.24) Cost to realize opportunity

*0*

## (3.6.1.25) Explanation of cost calculation

*The quantification of opportunities and the costs to meet these will be conducted in 2024.*

## (3.6.1.26) Strategy to realize opportunity

*Strategic action has been taken by Dyno Nobel Americas to shift operations and supply into emerging new world mineral markets in both South America and western USA, and increase revenues from the quarry and construction sector. Additionally, with the purchase of Titanobel in 2022, Dyno Nobel entered the French quarry and construction market and gained access to New Caledonian and West African markets with future facing mineral opportunities. When combined with the existing Nitromak business in Turkey, this provides a compelling foundation to grow the business across Europe, the Middle East and Africa.*

# Climate change

## (3.6.1.1) Opportunity identifier

☑ Opp4

## (3.6.1.3) Opportunity type and primary environmental opportunity driver

**Energy source**

☑ Use of carbon capture and storage

## (3.6.1.4) Value chain stage where the opportunity occurs

☑ Upstream value chain

## (3.6.1.5) Country/area where the opportunity occurs

☑ United States of America

## (3.6.1.6) River basin where the opportunity occurs

☑ Mississippi River

## (3.6.1.8) Organization specific description

*During 2023, the FEED study was completed for the proposed Carbon Capture Facility (CCF) at the Dyno Nobel Waggaman, Louisiana (WALA) ammonia manufacturing facility. The CCF is designed to capture the pure stream of CO2 created during the ammonia manufacturing process, which requires only drying and compression before transport via pipeline to a permanent geological sequestration site. Louisiana is an ideal site for CCS due to its geology, its existing CO2 pipeline infrastructure, and a range of potential local partners with experience in using proven technology and management techniques to meet the very stringent regulatory requirements set by the US EPA for Class VI wells. Following Memorandums of Understanding (MOUs) established in 2022 with several shortlisted parties to work through options for transport and deep well injection of the CO2, internal selection of a preferred partner was made in 2023. This CCS project would reduce CO2 emissions from the plant by 800,000 tCO2 per annum and Dyno Nobel was targeting commissioning in FY26. IPL reached an agreement for the sale of WALA to CF Industries Holdings, Inc. (CF) in March 2023, securing a 25-year ammonia supply agreement for up to 200,000 short tons of ammonia a year. This means the benefit of the CCF project to IPL/Dyno Nobel will be a scope 3 reduction rather than a scope 1 reduction. At the time of the sale, CF Industries announced that it anticipates implementing CCS at the site on an accelerated timeline.*

## (3.6.1.9) Primary financial effect of the opportunity

☑ Returns on investment in low-emission technology

## (3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

☑ Short-term

## (3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

☑ Very likely (90–100%)

## (3.6.1.12) Magnitude

☑ Low

## (3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

*The CCS project made the sale of our Waggaman Louisiana (WALA) facility more attractive for the buyer, CF Industries, who has stated publicly that its mission is to provide clean energy to feed and fuel the world sustainably, and has announced that it anticipates implementing CCS at the site on an accelerated timeline to increase its network's low-carbon ammonia production capability, and also support Louisiana's and the US climate goals. The sale thus ensured a good return on our* *investment in the carbon capture and storage facility up until the time it was sold in two areas: firstly, in the sale price of the asset, and secondly in securing a 25-year offtake agreement for ammonia with a lower carbon footprint, due to the CFF.*

## (3.6.1.15) Are you able to quantify the financial effects of the opportunity?

☑ No

## (3.6.1.24) Cost to realize opportunity

*US$1,800,000*

## (3.6.1.25) Explanation of cost calculation

*The investment in the CCF at Waggaman up to the sale of the asset was approximately US1.8m.*

## (3.6.1.26) Strategy to realize opportunity

*See above.*

## C4. Governance

### (4.1) Does your organization have a board of directors or an equivalent governing body?

#### (4.1.1) Board of directors or equivalent governing body

☑ Yes

#### (4.1.2) Frequency with which the board or equivalent meets

☑ More frequently than quarterly

#### (4.1.3) Types of directors your board or equivalent is comprised of

☑ Independent non-executive directors or equivalent

#### (4.1.4) Board diversity and inclusion policy

☑ No

### (4.1.1) Is there board-level oversight of environmental issues within your organization?

| | Board-level oversight of this environmental issue |
|---|---|
| Climate change | *Select from:*<br>☑ Yes |
| Water | *Select from:*<br>☑ Yes |
| Biodiversity | *Select from:*<br>☑ Yes |

## (4.1.2) Identify the positions (do not include any names) of the individuals or committees on the board with accountability for environmental issues and provide details of the board's oversight of environmental issues.

### Climate change

### (4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

☑ Board-level committee

### (4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

☑ Yes

### (4.1.2.3) Policies which outline the positions' accountability for this environmental issue

☑ Other policy applicable to the board, please specify:

- Charter of the Board
- Charter of the Audit and Risk Management Committee
- Charter of the HSEC Committee

### (4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

☑ Scheduled agenda item in some board meetings – at least annually

### (4.1.2.5) Governance mechanisms into which this environmental issue is integrated

*Select all that apply*

☑ Reviewing and guiding annual budgets
☑ Overseeing and guiding scenario analysis
☑ Overseeing the setting of corporate targets
☑ Monitoring progress towards corporate targets
☑ Approving corporate policies and/or commitments
☑ Monitoring the implementation of the business strategy
☑ Overseeing and guiding public policy engagement
☑ Overseeing and guiding public policy engagement
☑ Reviewing and guiding innovation/R&D priorities
☑ Approving and/or overseeing employee incentives
☑ Overseeing and guiding major capital expenditures

☑ Overseeing reporting, audit, and verification processes
☑ Monitoring the implementation of a climate transition plan
☑ Overseeing and guiding the development of a business strategy
☑ Overseeing and guiding acquisitions, mergers, and divestitures
☑ Monitoring compliance with corporate policies and/or commitments
☑ Overseeing and guiding the development of a climate transition plan
☑ Reviewing and guiding the assessment process for dependencies, impacts, risks, and opportunities
☑ Other, please specify: Overseeing the management of climate-related risks and opportunities.

## (4.1.2.7) Please explain

*During 2023, the IPL Board received direct reporting from management on issues relating to climate change in most, if not all, of its meetings during the year, including its two day meeting to review company and business units strategy. This reporting included periodic updates throughout the year on the progress of IPL's Net Zero Pathway, approval of CAPEX for major decarbonisation initiatives and briefings on new regulations, reporting frameworks and mandatory disclosures relating to climate change. The two day annual strategy meetings included review of company and business unit strategies in response to transitional market risks, physical risks, resilience and adaptation, decarbonisation and Net Zero strategy and integration into business strategy.*

*The CEO is a Board Member and was Chair of the IPL Decarbonisation and Energy Transition Steering Committee (DETSC) during the reporting period. The CEO and the DETSC are responsible for the Company's Net Zero Pathway and the strategic management of business risks and opportunities related to climate change. The Audit and Risk Management Committee (ARMC) of the Board has oversight of climate-related risk management, although the Board retains overall accountability for IPL's risk profile. The ARMC reviews risk scenarios, risk analyses and mitigation strategies, as well as how climate change-related risks are integrated into IPL's risk management processes.*

*There are three key ways in which the ARMC receives reporting on climate change-related risks and opportunities:*
*1. Via standard risk reporting, which is undertaken at each of the five ARMC meetings per year;*
*2. The annual Risk Review process with the Executive Team (ET) that informs the ARMC on the Group's strategic risks and mitigation plans; and*
*3. By exception, other significant events and progress related to the management of climate change-related risks are reported to the ARMC as required.*

*In addition, the Charter of the ARMC requires IPL's future climate related scenarios to be updated every three years and reported to the ARMC. The Health, Safety, Environment and Community (HSEC) Committee of the Board assists the Board in overseeing the Group's health, safety, environment and community (HSEC) performance and governance responsibilities, and the adequacy of the Group's HSEC framework. This includes the management and governance of climate change issues relating to employee health and safety, such as heat stress and risks to our people associated with extreme weather events; emergency planning and response procedures for our operations relating to extreme weather events; and the management of risks to the environment which are likely to be exacerbated by climate change, such as procedures to monitor and plan for an increasing risk of pond overflows and other releases to the environment due to increasing or shifting rainfall patterns over time.*

## Water

### (4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

☑ Board-level committee

### (4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

☑ Yes

### (4.1.2.3) Policies which outline the positions' accountability for this environmental issue

☑ Other policy applicable to the board, please specify**:**

Health, Safety, Environment & Community (HSEC) Management System

### (4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

☑ Scheduled agenda item in some board meetings – at least annually

### (4.1.2.5) Governance mechanisms into which this environmental issue is integrated

*Select all that apply*

☑ Overseeing the setting of corporate targets

☑ Monitoring progress towards corporate targets

☑ Approving corporate policies and/or commitments

☑ Overseeing and guiding major capital expenditures

☑ Overseeing reporting, audit, and verification processes

☑ Monitoring compliance with corporate policies and/or commitments

☑ Reviewing and guiding the assessment process for dependencies, impacts, risks, and opportunities

☑ Other, please specify**:** Reviewing an overseeing the risks associated with water, including financial risks and impact risks (i.e. to the environment)

## (4.1.2.7) Please explain

*The Health, Safety, Environment and Community (HSEC) Committee of the Board assists the Board in overseeing the Group's HSEC performance and governance responsibilities, and the adequacy of the Group's HSEC framework. The HSEC Management System includes water under Environmental Standard 11 and other standards that outline the requirements regarding the prevention, reporting and investigation of incidents of spills, impacts, risks registers and non-compliances as they relate to water, such as pond overflows.*

*Responsibility for water policies and water strategy is delegated to the CEO and the Executive Team. The President Global Manufacturing & HSE is the ET member with responsibility for the management of water use and discharge at manufacturing operations, including where these relate to environmental licensing. Operations staff manage water use and discharge and report annually through the environmental team to the Sustainability Manager and HSEC Committee of the Board. The Board oversees major capital expenditures such as new facilities and major water infrastructure. Water resource considerations for these are factored into location planning for new operations which are managed by The President Global Manufacturing & HSE. The manufacture of ammonia requires access to large quantities of good quality fresh water for cooling. IPL manages water risks by ensuring that new ammonia manufacturing facilities are located close to abundant sources of freshwater. For example, our most recently built ammonia plant was built in Waggaman, Louisiana in 2016, on a brownfield site on the West Bank of the Mississippi River in Louisiana.*

*The Audit and Risk Management Committee (ARMC) of the Board has responsibility for overseeing water-related risks and the Board reviews and guides risk management policies. IPL has a formalised process in place to identify risks in the supply chain, including water supply. As per the Company's Group Risk Policy, the oversight and management of material business risk is managed within a comprehensive risk management process, overseen by the ARMC. As of 2018, IPL began using future climate-related scenario analyses in its risk assessment processes, as recommended the G20 Financial Stability Board Task Force on Climate-related Financial Disclosures (TCFD) report. The Charter of the IPL Audit and Risk Management Committee (ARMC) of the Board mandates that these future climate-related scenarios be updated every three years. Identified risks related to water included water availability and pricing, rainfall changes which may impact IPL's farming and mining customers, risks related to water management at IPL sites and disruptions to supply chains at two sites related to flooding. The strategies to manage these risks are reviewed in two ways: periodically by the ARMC committee of the Board and annually by the full IPL Board in a two day workshop to review company and business units strategies.*

# Biodiversity

## (4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

☑ Board-level committee

## (4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

☑ No

## (4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

☑ Sporadic – agenda item as important matters arise

### (4.1.2.5) Governance mechanisms into which this environmental issue is integrated

*Select all that apply*

☑ Reviewing and guiding the assessment process for dependencies, impacts, risks, and opportunities

☑ Approving corporate policies and/or commitments

☑ Overseeing and guiding acquisitions, mergers, and divestitures

☑ Other, please specify: Overseeing and reviewing risk assessments, including IPF's TNFD assessment, and the management of identified risks relating to biodiversity

### (4.1.2.7) Please explain

*The Health, Safety, Environment and Community (HSEC) Committee of the Board assists the Board in overseeing the Group's HSEC performance and governance responsibilities, and the adequacy of the Group's HSEC framework. The HSEC Management System includes an Environmental Standard which sets out the systems and processes which must be implemented to identify and manage environmental risks, stating that the assessment of Environmental Aspects and Impacts shall be completed to identify and mitigate risks related to environmental conditions for all present and former site operations, including environmental impacts related to site activities, products and services, flora, fauna and land use. Responsibility for its implementation is delegated to the CEO and the Executive Team.*

*The President Global Manufacturing & HSE is the ET member with responsibility for the implementation of the HSEC Management System. Operations staff conduct risk assessments to arrive at site based Environmental Aspects and Impacts Registers which include any identified risks to biodiversity. During the reporting period, a TNFD LEAP Assessment was conducted for IPL's fertilisers business, IPF. The results were reported to the HSEC Committee of the Board, along with management strategies.*

## (4.2) Does your organization's board have competency on environmental issues?

### Climate change

### (4.2.1) Board-level competency on this environmental issue

☑ Yes

### (4.2.2) Mechanisms to maintain an environmentally competent board

☑ Consulting regularly with an internal, permanent, subject-expert working group
☑ Integrating knowledge of environmental issues into board nominating process
☑ Having at least one board member with expertise on this environmental issue

## (4.2.3) Environmental expertise of the board member

**Additional training**
☑ Course certificate (relating to environmental issues), please specify :Cambridge Institute for Sustainability Leadership Director's Course
☑ Training in an environmental subject by a certified organization, please specify :AICD

# Water

## (4.2.1) Board-level competency on this environmental issue

☑ Yes

## (4.2.2) Mechanisms to maintain an environmentally competent board

☑ Consulting regularly with an internal, permanent, subject-expert working group
☑ Integrating knowledge of environmental issues into board nominating process
☑ Having at least one board member with expertise on this environmental issue

## (4.2.3) Environmental expertise of the board member

**Additional training**
☑ Course certificate (relating to environmental issues), please specify :Cambridge Institute for Sustainability Leadership Director's Course

## (4.3) Is there management-level responsibility for environmental issues within your organization?

| | Management-level responsibility for this environmental issue |
|---|---|
| Climate change | ☑ Yes |
| Water | ☑ Yes |
| Biodiversity | ☑ Yes |

## (4.3.1) Provide the highest senior management-level positions or committees with responsibility for environmental issues (do not include the names of individuals).

### Climate change

### (4.3.1.1) Position of individual or committee with responsibility

**Executive level**

☑ Chief Executive Officer (CEO)

### (4.3.1.2) Environmental responsibilities of this position

**Dependencies, impacts, risks and opportunities**

☑ Managing environmental dependencies, impacts, risks, and opportunities

**Policies, commitments, and targets**

☑ Measuring progress towards environmental corporate targets

☑ Setting corporate environmental policies and/or commitments

☑ Setting corporate environmental targets

**Strategy and financial planning**

☑ Developing a climate transition plan

☑ Implementing a climate transition plan

☑ Managing acquisitions, mergers, and divestitures related to environmental issues

☑ Managing annual budgets related to environmental issues

**Other**

☑ Providing employee incentives related to environmental performance

## (4.3.1.4) Reporting line

☑ Reports to the board directly

## (4.3.1.5) Frequency of reporting to the board on environmental issues

☑ Quarterly

## (4.3.1.6) Please explain

*The MD&CEO and his Executive Team develop the Group's business strategy, planning, investment decisions and risk management processes. The MD&CEO is responsible for delivering the climate change strategy approved by the Board. The CEO Chairs the IPL Decarbonisation and Energy Transition Steering Committee (DETSC) and, as the person with Board delegated authority to implement the corporate strategy and policy initiatives, is responsible for managing climate-related issues. These responsibilities include coordinating with the other DETSC members on decarbonisation the assessment and monitoring of climate-related risks and opportunities and reporting results to the Board during Board Meetings.*

# Water

## (4.3.1.1) Position of individual or committee with responsibility

**Executive level**

☑ Other C-Suite Officer, please specify: Chief HSE and Operations Excellence Officer (previously the President Global Manufacturing & HSE)

## (4.3.1.2) Environmental responsibilities of this position

**Dependencies, impacts, risks and opportunities**

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

**Policies, commitments, and targets**

☑ Monitoring compliance with corporate environmental policies and/or commitments

☑ Measuring progress towards environmental corporate targets

☑ Setting corporate environmental policies and/or commitments

☑ Setting corporate environmental targets

**Strategy and financial planning**

☑ Managing environmental reporting, audit, and verification processes

☑ Managing major capital and/or operational expenditures relating to environmental issues

**Other**

☑ Providing employee incentives related to environmental performance

## (4.3.1.4) Reporting line

☑ Reports to the Chief Executive Officer (CEO)

## (4.3.1.5) Frequency of reporting to the board on environmental issues

☑ Quarterly

## (4.3.1.6) Please explain

*The Chief HSE & Operations Excellence Officer is responsible to implement the HSEC Management System and together with the Vice President Corporate Health, Safety and Environment are accountable for advising the CEO and Executive Team on best practice strategies for health, safety and environmental improvement, including water use and discharge management. Her team supports our organisation in developing and delivering the Zero Harm strategy and oversees a Group-wide network of safety and environmental professionals, as well as operational leaders, to achieve our goals and support line management in improving our performance. Regional safety professionals provide advice and support to line management by sharing best practices, and standardising, simplifying, coaching and coordinating health and safety activities across the Group.*

*The Zero Harm Council (ZHC), chaired by our CEO and consisting of all members of the Executive Team and the Vice President Corporate Health, Safety and Environment, is accountable for overseeing the Group's execution of the Zero Harm Strategy and reviewing health, safety and environmental performance.*

## Biodiversity

### (4.3.1.1) Position of individual or committee with responsibility

**Executive level**

☑ Other C-Suite Officer, please specify: Chief HSE and Operations Excellence Officer (previously the President Global Manufacturing & HSE)

### (4.3.1.2) Environmental responsibilities of this position

**Dependencies, impacts, risks and opportunities**

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

**Policies, commitments, and targets**

☑ Monitoring compliance with corporate environmental policies and/or commitments

☑ Measuring progress towards environmental corporate targets

☑ Setting corporate environmental policies and/or commitments

☑ Setting corporate environmental targets

**Strategy and financial planning**

☑ Managing environmental reporting, audit, and verification processes

☑ Managing major capital and/or operational expenditures relating to environmental issues

**Other**

☑ Providing employee incentives related to environmental performance

### (4.3.1.4) Reporting line

☑ Reports to the Chief Executive Officer (CEO)

### (4.3.1.5) Frequency of reporting to the board on environmental issues

☑ Quarterly

## (4.3.1.6) Please explain

*The Chief HSE & Operations Excellence Officer is responsible to implement the HSEC Management System and together with the Vice President Corporate Health, Safety and Environment are accountable for advising the CEO and Executive Team on best practice strategies for health, safety and environmental improvement, including risk assessment and management of issues relating to, flora, fauna and land use. Her team supports our organisation in developing and delivering the Zero Harm strategy and oversees a Group-wide network of safety and environmental professionals, as well as operational leaders, to achieve our goals and support line management in improving our performance. Regional safety professionals provide advice and support to line management by sharing best practices, and standardising, simplifying, coaching and coordinating health and safety activities across the Group. The Zero Harm Council (ZHC), chaired by our CEO and consisting of all members of the Executive Team and the Vice President Corporate Health, Safety and Environment, is accountable for overseeing the Group's execution of the Zero Harm Strategy and reviewing health, safety and environmental performance.*

### Climate change

## (4.3.1.1) Position of individual or committee with responsibility

**Executive level**

☑ Chief Financial Officer (CFO)

## (4.3.1.2) Environmental responsibilities of this position

**Strategy and financial planning**

☑ Managing annual budgets related to environmental issues

☑ Managing environmental reporting, audit, and verification processes

☑ Managing major capital and/or operational expenditures relating to environmental issues

**Other**

☑ Providing employee incentives related to environmental performance

## (4.3.1.4) Reporting line

☑ Reports to the Chief Executive Officer (CEO)

## (4.3.1.5) Frequency of reporting to the board on environmental issues

☑ Quarterly

## (4.3.1.6) Please explain

*The Chief Financial Officer (CFO) is responsible for the management of the financial aspects of climate change. The CFO is the Executive Team member with oversight of the management and mitigation of principal risks, including the assessment and management of climate-related financial risks, that could materially impact the Group's business objectives and exceed its risk tolerance. The Chief Risk Officer reports to the CFO. The CFO is also responsible for IPL's Capital Allocation Framework and IPL's internal carbon pricing model. The Capital Allocation Framework prioritises 'Sustainability Capital' as part of the order 1, or 'first taker' of capital. This capital is allocated to progress a range of major projects required to decarbonise our operations. Internal carbon pricing has been included in capital expenditure assessments for projects at our major manufacturing sites in Australia since Australian Carbon Credit Units (ACCUs) were introduced in 2012, with the price reflecting the market price of ACCUs. In 2021, the Board formally approved the application of this carbon price to all future growth capital and investment decisions. We continued to embed this into our processes, with the objective of applying the carbon price to all capital projects, consistent with the Capital Allocation Framework, during 2023. The price is currently A32, and is projected to increase to A50 by 2026, A65 by 2030, A130 by 2040 and A258 by 2050. A range of carbon prices are also included in our scenario analyses.*

# Climate change

## (4.3.1.1) Position of individual or committee with responsibility

**Other**

☑ Other, please specify: Chief Strategy and Sustainability Officer

## (4.3.1.2) Environmental responsibilities of this position

**Dependencies, impacts, risks and opportunities**

☑ Assessing future trends in environmental dependencies, impacts, risks, and opportunities

**Engagement**

☑ Managing engagement in landscapes and/or jurisdictions

☑ Managing public policy engagement related to environmental issues

☑ Managing value chain engagement related to environmental issues

**Policies, commitments, and targets**

☑ Monitoring compliance with corporate environmental policies and/or commitments

☑ Measuring progress towards environmental corporate targets

☑ Measuring progress towards environmental science-based targets

☑ Setting corporate environmental policies and/or commitments

☑ Setting corporate environmental targets

**Strategy and financial planning**

☑ Developing a business strategy which considers environmental issues

☑ Developing a climate transition plan

☑ Implementing a climate transition plan

☑ Managing acquisitions, mergers, and divestitures related to environmental issues

☑ Managing priorities related to innovation/low-environmental impact products or services (including R&D)

## (4.3.1.4) Reporting line

☑ Reports to the Chief Executive Officer (CEO)

## (4.3.1.5) Frequency of reporting to the board on environmental issues

☑ Quarterly

## (4.3.1.6) Please explain

*The Chief Strategy and Sustainability Officer (CSSO) has significant experience in strategy and sustainability, and is tasked with overseeing the development of the IPL Net Zero Pathway and the integration of climate-related issues into Company strategy. This role is also responsible for the evaluation and prioritisation of developing technologies to decarbonise IPL's manufacturing operations and has responsibility for progressing IPL's partnership with FFI to investigate green ammonia production at Gibson Island. The CSSO's team includes:  The Corporate Sustainability Manager (CSM ) The VP Strategic Project Development*

# Climate change

## (4.3.1.1) Position of individual or committee with responsibility

**Executive level**

☑ Other C-Suite Officer, please specify: Chief HSE and Operations Excellence Officer (previously the President Global Manufacturing & HSE)

## (4.3.1.2) Environmental responsibilities of this position

**Dependencies, impacts, risks and opportunities**

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Assessing future trends in environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

**Policies, commitments, and targets**

☑ Monitoring compliance with corporate environmental policies and/or commitments

☑ Measuring progress towards environmental corporate targets

☑ Setting corporate environmental policies and/or commitments

☑ Setting corporate environmental targets

## (4.3.1.4) Reporting line

☑ Reports to the Chief Executive Officer (CEO)

## (4.3.1.5) Frequency of reporting to the board on environmental issues

☑ Quarterly

## (4.3.1.6) Please explain

*The Chief HSE & Operations Excellence Officer (previously the President Global Manufacturing and HSE) is an expert in IPL's global manufacturing facilities, which generate 97% of the Company's GHG, and also oversees the maintenance shutdown schedules required to implement new technologies to reduce emissions. As such, this position is assigned the responsibility of implementing projects to achieve GHG emissions reductions at IPL's manufacturing facilities and to establish a technical capability and practices framework to support IPL's Green Ammonia Operate and Maintain strategy. In addition, the Chief HSE & Operations Excellence Officer is responsible to implement the HSEC Management System and together with the Vice President Corporate Health, Safety and Environment are accountable for advising the CEO and Executive Team on best practice strategies for health, safety and environmental improvement. Her team supports our organisation in developing and delivering the Zero Harm strategy and oversees a Group-wide network of safety and environmental professionals, as well as operational leaders, to achieve our goals and support line management in improving our performance. Regional safety professionals provide advice and support to line management by sharing best practices, and standardising, simplifying, coaching and coordinating health and safety activities across the Group. The Zero Harm Council (ZHC), chaired by our CEO and consisting of all members of the Executive Team and the Vice President Corporate Health, Safety and Environment, is accountable for overseeing the Group's execution of the Zero Harm Strategy and reviewing health, safety and environmental performance.*

## Climate change

### (4.3.1.1) Position of individual or committee with responsibility

**Executive level**

☑ Chief Technology Officer (CTO)

### (4.3.1.2) Environmental responsibilities of this position

**Strategy and financial planning**

☑ Developing a business strategy which considers environmental issues

☑ Managing priorities related to innovation/low-environmental impact products or services (including R&D)

### (4.3.1.4) Reporting line

*Select from:*

☑ Reports to the Chief Executive Officer (CEO)

### (4.3.1.5) Frequency of reporting to the board on environmental issues

*Select from:*

☑ Quarterly

### (4.3.1.6) Please explain

*The Chief Technology Officer is responsible for the development of low carbon products and services, which reduce customer GHG and, therefore, IPL's downstream scope 3 GHG.*

## Climate change

### (4.3.1.1) Position of individual or committee with responsibility

**Committee**

☑ Safety, Health, Environment and Quality committee

## (4.3.1.2) Environmental responsibilities of this position

**Dependencies, impacts, risks and opportunities**

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Assessing future trends in environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

**Policies, commitments, and targets**

☑ Monitoring compliance with corporate environmental policies and/or commitments

☑ Measuring progress towards environmental corporate targets

**Strategy and financial planning**

☑ Implementing the business strategy related to environmental issues

## (4.3.1.4) Reporting line

☑ Reports to the board directly

## (4.3.1.5) Frequency of reporting to the board on environmental issues

☑ Quarterly

## (4.3.1.6) Please explain

*The Zero Harm Council (ZHC), chaired by our CEO and consisting of all members of the Executive Team and the Vice President Corporate Health, Safety and Environment, is accountable for overseeing the Group's execution of the Zero Harm Strategy and reviewing health, safety and environmental performance. The ZHC reports directly to the Board's Health, Safety, Environment and Community (HSEC) Committee.*

# Climate change

## (4.3.1.1) Position of individual or committee with responsibility

**Executive level**

☑ President

## (4.3.1.2) Environmental responsibilities of this position

**Dependencies, impacts, risks and opportunities**

☑ Managing environmental dependencies, impacts, risks, and opportunities

**Policies, commitments, and targets**

☑ Monitoring compliance with corporate environmental policies and/or commitments

☑ Measuring progress towards environmental corporate targets

**Strategy and financial planning**

☑ Developing a business strategy which considers environmental issues

☑ Implementing a climate transition plan

☑ Implementing the business strategy related to environmental issues

☑ Managing major capital and/or operational expenditures relating to environmental issues

## (4.3.1.4) Reporting line

☑ Reports to the Chief Executive Officer (CEO)

## (4.3.1.5) Frequency of reporting to the board on environmental issues

☑ Quarterly

## (4.3.1.6) Please explain

*Business Unit Managers are ET (C-Suite) members and include the President Dyno Nobel Asia Pacific, President Dyno Nobel Americas and President Incitec Pivot Fertilisers. They oversee the manufacturing maintenance shutdown schedules required to implement the major aspects of the climate transition plan, including the installation of new technologies to reduce operational GHG emissions. As such, these positions are assigned the responsibility of overseeing the major CAPEX projects required to achieve GHG emissions reductions at the manufacturing facilities within their regions, such as the nitrous oxide abatement projects at Moranbah, Australia and Louisiana, Missouri, as well the Waggaman, Louisiana CCS project, as well as resilience/adaptation projects within their BUs. As the business unit managers, they are responsible for integrating climate-related issues into the strategies of their business units and managing climate-related risks and opportunities that relate to their businesses. They are also responsible for the development and implementation of scope 3 management strategies and scope 3 reduction targets as they pertain to their Business Units' value chain activities, including managing value chain engagement on climate-related issues which relate to the BU's purchases and planning scope 3 reduction strategy upstream and downstream.*

### Climate change

## (4.3.1.1) Position of individual or committee with responsibility

**Committee**

☑ Other committee, please specify: Decarbonisation and Energy Transition Steering Committee

## (4.3.1.2) Environmental responsibilities of this position

**Strategy and financial planning**

☑ Developing a climate transition plan

☑ Implementing a climate transition plan

## (4.3.1.4) Reporting line

☑ Reports to the Chief Executive Officer (CEO)

## (4.3.1.5) Frequency of reporting to the board on environmental issues

☑ Quarterly

## (4.3.1.6) Please explain

*The MD&CEO is Chair of the IPL Decarbonisation and Energy Transition (DET) Steering Committee, which comprises selected Executives and other senior management. The MD&CEO and the DET Steering Committee are responsible for the development of IPL's Net Zero Transition Pathway and the strategic management of business risks and opportunities related to climate change, including the incorporation of opportunities and key trends into business strategy.*

### Climate change

## (4.3.1.1) Position of individual or committee with responsibility

**Other**

☑ Other, please specify: VP Strategic Project Development

## (4.3.1.2) Environmental responsibilities of this position

**Strategy and financial planning**

☑ Developing a climate transition plan

☑ Implementing a climate transition plan

## (4.3.1.4) Reporting line

☑ Reports to the Chief Sustainability Officer (CSO)

## (4.3.1.5) Frequency of reporting to the board on environmental issues

☑ As important matters arise

## (4.3.1.6) Please explain

*The VP Strategic Project Development has significant experience in IPL's global manufacturing facilities and CAPEX approval process and is tasked with the assessment of the technical and commercial readiness of emerging technologies required for IPL's decarbonisation. The VP Strategic Project Development also works with operations-based project teams to provide the DET Steering Committee with an additional level of oversight regarding the progress of specific projects related to IPL's Net Zero Pathway.*

# Climate change

## (4.3.1.1) Position of individual or committee with responsibility

**Other**

☑ Other, please specify**:** Corporate Sustainability Manager

## (4.3.1.2) Environmental responsibilities of this position

**Strategy and financial planning**

☑ Conducting environmental scenario analysis

☑ Developing a climate transition plan

**Other**

☑ Other, please specify: Advising on climate related issues across business units and corporate functions

## (4.3.1.4) Reporting line

☑ Reports to the Chief Sustainability Officer (CSO)

## (4.3.1.5) Frequency of reporting to the board on environmental issues

☑ As important matters arise

## (4.3.1.6) Please explain

*The Corporate Sustainability Manager (CSM) is an Environmental Geoscientist with postgraduate research in palaeo-climate reconstruction. As a subject matter expert in the fields of climate change and sustainability, the CSM has been assigned the responsibility of working with the Chief Risk Officer to oversee climate-related scenario risk assessment. The CSM also engages with investors and other stakeholders, in conjunction with the Company Secretary and General Manager Investor Relations, during discussions on IPL's Climate Management Strategy, is a member of the DET Steering Committee and chairs the Carbon Pricing Steering Committee. The CSM also advises across IPL's business units and corporate functions on climate-related issues including the management of risks and opportunities, incorporating climate considerations into business unit strategies, integrating scope 3 measurement and management into business unit strategies, mandatory GHG reporting schemes and carbon pricing schemes globally.*

# Climate change

## (4.3.1.1) Position of individual or committee with responsibility

**Committee**

☑ Other committee, please specify: Carbon Pricing Steering Committee

## (4.3.1.2) Environmental responsibilities of this position

**Other**

☑ Other, please specify: Managing carbon pricing schemes and integrating into strategy

## (4.3.1.4) Reporting line

☑ Reports to the Chief Executive Officer (CEO)

## (4.3.1.5) Frequency of reporting to the board on environmental issues

☑ As important matters arise

## (4.3.1.6) Please explain

*The Carbon Pricing Steering Committee (CPSC) is chaired by the Corporate Sustainability Manager and comprises manufacturing, strategy, finance, treasury, environmental and energy contract management personnel across our global sites. Through the Corporate Sustainability Manager and VP Strategic Project Development, the committee continually monitors emerging carbon pricing developments and informs the CFO, the Decarbonisation & Energy Transition Steering Committee and the Board of relevant compliance requirements and market opportunities. For example, the emerging carbon cap and trade regulation in Oregon, a result of the Governor's Executive Order, is currently being tracked by the CPSC. Corporate Legal and site-based personnel at our St Helens, Oregon site are engaging with the relevant regulatory body and report back to the CPSC.*

# Climate change

## (4.3.1.1) Position of individual or committee with responsibility

**Executive level**

☑ Chief Risks Officer (CRO)

## (4.3.1.2) Environmental responsibilities of this position

**Dependencies, impacts, risks and opportunities**

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

**Policies, commitments, and targets**

☑ Monitoring compliance with corporate environmental policies and/or commitments

**Strategy and financial planning**

☑ Conducting environmental scenario analysis

**Other**

☑ Other, please specify: Assessing climate and nature related risks and opportunities; Managing climate and nature related risks and opportunities

## (4.3.1.4) Reporting line

☑ Reports to the Chief Financial Officer (CFO)

## (4.3.1.5) Frequency of reporting to the board on environmental issues

☑ Quarterly

## (4.3.1.6) Please explain

*The Chief Risk Officer works with the Corporate Sustainability Manager to oversee climate-related scenario risk and opportunity assessment and reports directly to the Audit and Risk Management Committee of the Board. (The Risk Manager reports to the CFO as far as management reporting line).*

# Climate change

## (4.3.1.1) Position of individual or committee with responsibility

**Other**

☑ Other, please specify: Facility Manager

## (4.3.1.2) Environmental responsibilities of this position

**Dependencies, impacts, risks and opportunities**

☑ Managing environmental dependencies, impacts, risks, and opportunities

**Strategy and financial planning**

☑ Implementing a climate transition plan

☑ Managing major capital and/or operational expenditures relating to environmental issues

## (4.3.1.4) Reporting line

☑ Other, please specify: Chief HSE & Operations Excellence Officer reporting line (through to CEO)

## (4.3.1.5) Frequency of reporting to the board on environmental issues

☑ As important matters arise

## (4.3.1.6) Please explain

*Facility Managers implement decarbonisation projects, including managing the major capital and operational expenditures that relate to these, and manage climate related risks and opportunities pertaining to their operational sites.*

# Biodiversity

## (4.3.1.1) Position of individual or committee with responsibility

**Executive level**

☑ President

## (4.3.1.2) Environmental responsibilities of this position

**Dependencies, impacts, risks and opportunities**

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Assessing future trends in environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

**Engagement**

☑ Managing value chain engagement related to environmental issues

**Policies, commitments, and targets**

☑ Monitoring compliance with corporate environmental policies and/or commitments

☑ Measuring progress towards environmental corporate targets

**Strategy and financial planning**

☑ Developing a business strategy which considers environmental issues

☑ Implementing the business strategy related to environmental issues

## (4.3.1.4) Reporting line

☑ Reports to the Chief Executive Officer (CEO)

## (4.3.1.5) Frequency of reporting to the board on environmental issues

☑ As important matters arise

## (4.3.1.6) Please explain

*The President of Incitec Pivot Fertilisers is responsible for the assessment and management of IPF's nature related dependencies, risks and opportunities, and the management of identified dependencies, risks and opportunities. As a fertiliser business, whose products, services and customers have interactions with, and dependencies on, soil, soil biodiversity, water, and nitrogen, phosphorus and carbon cycles, the President IPF is also responsible to build the management of these into the business strategy of this business, including engaging with farming customers to ensure responsible use of our fertiliser products.*

# Biodiversity

## (4.3.1.1) Position of individual or committee with responsibility

**Committee**

☑ Safety, Health, Environment and Quality committee

## (4.3.1.2) Environmental responsibilities of this position

**Dependencies, impacts, risks and opportunities**

☑ Managing environmental dependencies, impacts, risks, and opportunities

## (4.3.1.4) Reporting line

☑ Reports to the board directly

### (4.3.1.5) Frequency of reporting to the board on environmental issues

☑ Quarterly

### (4.3.1.6) Please explain

*The IPL ET Zero Harm Committee is the senior management level body which implements the IPL Health, Safety, Environment and Community Management System (HSEC MS) and reports directly to the HSEC Committee of the Board. The HSEC MS is the system by which IPF (and IPL's other business units) manage environmental risks and opportunities including those relating to nature and biodiversity.*
*[Add row]*

## (4.5) Do you provide monetary incentives for the management of environmental issues, including the attainment of targets?

## Climate change

### (4.5.1) Provision of monetary incentives related to this environmental issue

☑ Yes

### (4.5.2) % of total C-suite and board-level monetary incentives linked to the management of this environmental issue

*10*

### (4.5.3) Please explain

*In FY23 KPIs relating to short- and medium-term GHG reductions were incorporated under a Sustainability and Climate Change component (10%) of 'at risk' STI objectives for all Executive KMP. These were designed to align with climate change management strategies, and to focus each executive on the key short-term objectives within their area of influence that contribute. They included KPIs related to:*
*» Continued integration of decarbonisation objectives into IPL's business strategy.*
*» Key decarbonisation projects*
*» Progress on technology solutions to reduce GHG emissions of customers.*
*A climate change related performance condition (10%) was also introduced in the LTI Performance Rights Plan 2021/24 (LTI 2021/24) as an additional 'at risk' metric. This performance condition measures the Company's organisational performance against its climate change strategy, progress towards IPL's operational GHG emission reduction targets and its development of a scope 3 GHG reduction strategy.*

### Water

## (4.5.1) Provision of monetary incentives related to this environmental issue

☑ No, and we do not plan to introduce them in the next two years

## (4.5.3) Please explain

*Water risks are assessed annually using the WRI Aqueduct Tool, 3 yearly in our climate related scenario risk assessments and were assessed in our TNFD assessment for our IPF business. The majority of IPL sites operate in regions with abundant natural water resources, with only a few sites identified as being exposed to water related risks. For this reason, IPL does not provide C-suite monetary incentives linked to the management of water.*
*[Fixed row]*

# (4.5.1) Provide further details on the monetary incentives provided for the management of environmental issues (do not include the names of individuals).

### Climate change

## (4.5.1.1) Position entitled to monetary incentive

**Board or executive level**

☑ Chief Executive Officer (CEO)

## (4.5.1.2) Incentives

☑ Bonus - % of salary

## (4.5.1.3) Performance metrics

**Targets**

☑ Progress towards environmental targets

☑ Reduction in absolute emissions in line with net-zero target

**Strategy and financial planning**

☑ Shareholder approval of climate transition plan

**Emission reduction**

☑ Implementation of an emissions reduction initiative

☑ Reduction in absolute emissions

**Resource use and efficiency**

☑ Improvements in emissions data, reporting, and third-party verification

## (4.5.1.4) Incentive plan the incentives are linked to

☑ Both Short-Term and Long-Term Incentive Plan, or equivalent

## (4.5.1.5) Further details of incentives

*For FY23, key performance indicators (KPIs) relating to the progress towards achieving IPL's short- and medium-term strategic GHG reduction objectives were incorporated under a separate Sustainability and Climate Change component (10%) of 'at risk' STI objectives for all Executive KMP. These included KPIs relating to incorporation of decarbonisation objectives into IPL's business strategy, advancement of major capex related decarbonisation projects and scope 3 strategy development.*

*With the practical and technological challenges related to reducing GHG emissions in the longer-term, a climate change related performance condition (10%) was introduced in the LTI Performance Rights Plan 2021/24 (LTI 2021/24) as an additional 'at risk' metric. This performance condition measures the Company's organisational performance against its climate change strategy, progress towards IPL's operational GHG emission reduction targets (announced in 2021), and its development of a scope 3 GHG emissions reduction strategy. Key success will be driven by material progress against longer-term objectives attached to the Moranbah N2O GHG abatement project and the Waggaman CO2 sequestration project. The climate change performance condition within the LTI 2022/25 is focused on demonstrating material progress towards IPL's GHG reduction targets (and identified pathway) and scope 3 emission reduction strategy. Progress is focused on the following areas:*
*» Moranbah N2O tertiary abatement project*
*» Waggaman permanent geological CO2 sequestration project*
*» Louisiana, Missouri N2O abatement project » Gibson Island Green Ammonia Project in partnership with FFI.*

*The performance period for the LTI 2021/24 Plan is 1 October 2021 to 30 September 2024 and is 1 October 2022 to 30 September 2025 for the LTI 2022/25 Plan. After expiry of the relevant performance period, the Board determines whether the performance conditions of the LTI Plan are satisfied based on testing of the performance measures at the end of the relevant performance period. To the extent that the performance conditions are satisfied during the performance period, the performance rights will vest or lapse.*

## (4.5.1.6) How the position’s incentives contribute to the achievement of your environmental commitments and/or climate transition plan

*These objectives were designed to align with IPL’s overall sustainability and climate change management strategies, and to focus each executive on the key short and long-term objectives within their area of influence that contribute towards IPL’s longer-term milestones. To address the challenges and opportunities associated with climate change, and specifically, GHG emission reductions, the FY23 STI for executives included performance conditions relating to the progression of operational GHG reduction projects and the further development of pathways to Net Zero. These were in the STI under "Delivery of various Climate change related projects (10%). For the CFO, these included "Develop and implement investment criteria for ESG decisions: Embed effective capital allocation framework in line with ESG objectives." In FY23, Projects were achieved between target and stretch result (15%): ESG criteria have been approved and incorporated into the financial analysis of capital projects, including carbon price. Capital allocation criteria approved and applied for all sustainability projects. In assessing the overall outcome the Board also considered the CFO's contribution to the achievement of key milestones on operating emission reduction projects in the STI objectives of the former MD&CEO. This included CCS at Waggaman, Louisiana ammonia plant and the tertiary nitrous oxide (N2O) abatement projects at LOMO and Moranbah ammonium nitrate manufacturing facilities. For the BU Presidents, Progress was made against individual climate change objectives and delivered a threshold outcome for one president, and the other delivered outstanding outcomes against his individual climate change metrics (see page 68 of the 2023 IPL Annual Report)*

### Climate change

## (4.5.1.1) Position entitled to monetary incentive

**Board or executive level**

☑ Chief Financial Officer (CFO)

## (4.5.1.2) Incentives

☑ Bonus - % of salary

## (4.5.1.3) Performance metrics

**Strategy and financial planning**

☑ Increased alignment of capex with transition plan and/or sustainable finance taxonomy

## (4.5.1.4) Incentive plan the incentives are linked to

☑ Both Short-Term and Long-Term Incentive Plan, or equivalent

## (4.5.1.5) Further details of incentives

*For FY23, key performance indicators (KPIs) relating to the progress towards achieving IPL's short- and medium-term strategic GHG reduction objectives were incorporated under a separate Sustainability and Climate Change component (10%) of 'at risk' STI objectives for all Executive KMP. These included KPIs relating to incorporation of decarbonisation objectives into IPL's business strategy, advancement of major capex related decarbonisation projects and, for the CFO, integrating decarbonisation spend into the capital allocation framework.*

*With the practical and technological challenges related to reducing GHG emissions in the longer-term, a climate change related performance condition (10%) was introduced in the LTI Performance Rights Plan 2021/24 (LTI 2021/24) as an additional 'at risk' metric. This performance condition measures the Company's organisational performance against its climate change strategy, progress towards IPL's operational GHG emission reduction targets (announced in 2021), and its development of a scope 3 GHG emissions reduction strategy. Key success will be driven by material progress against longer-term objectives attached to the Moranbah N2O GHG abatement project and the Waggaman CO2 sequestration project. The climate change performance condition within the LTI 2022/25 is focused on demonstrating material progress towards IPL's GHG reduction targets (and identified pathway) and scope 3 emission reduction strategy. Progress is focused on the following areas:*
*» Moranbah N2O tertiary abatement project*
*» Waggaman permanent geological CO2 sequestration project*
*» Louisiana, Missouri N2O abatement project*
*» Gibson Island Green Ammonia Project in partnership with FFI.*

*The performance period for the LTI 2021/24 Plan is 1 October 2021 to 30 September 2024 and is 1 October 2022 to 30 September 2025 for the LTI 2022/25 Plan. After expiry of the relevant performance period, the Board determines whether the performance conditions of the LTI Plan are satisfied based on testing of the performance measures at the end of the relevant performance period. To the extent that the performance conditions are satisfied during the performance period, the performance rights will vest or lapse.*

## (4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

*These objectives were designed to align with IPL's overall sustainability and climate change management strategies, and to focus each executive on the key short-term objectives within their area of influence that contribute towards IPL's longer-term milestones. To address the challenges and opportunities associated with climate change, and specifically, GHG emission reductions, the FY23 STI for executives included performance conditions relating to the progression of operational GHG reduction projects and the further development of pathways to Net Zero. These were in the STI under "Delivery of various Climate change related projects (10%). For the CFO, these included "Develop and implement investment criteria for ESG decisions: Embed effective capital allocation framework in line with ESG objectives." In FY23, Projects were achieved between target and stretch result (15%): ESG criteria have been approved and incorporated into the financial analysis of capital projects, including carbon price. Capital allocation criteria approved and applied for all sustainability projects. In assessing the overall outcome the Board also considered the CFO's contribution to the achievement of key milestones on operating emission reduction projects in the STI objectives of the former MD&CEO. This included CCS at Waggaman, Louisiana ammonia plant and the tertiary nitrous oxide (N2O) abatement projects at LOMO and Moranbah ammonium nitrate manufacturing facilities. For the BU Presidents, Progress was made against individual climate change objectives and delivered a threshold outcome for one president, and the other delivered outstanding outcomes against his individual climate change metrics (see page 68 of the 2023 IPL Annual Report)*

## Climate change

### (4.5.1.1) Position entitled to monetary incentive

**Board or executive level**

☑ Chief Sustainability Officer (CSO)

### (4.5.1.2) Incentives

☑ Bonus - % of salary

### (4.5.1.3) Performance metrics

**Targets**

☑ Achievement of environmental targets

☑ Reduction in absolute emissions in line with net-zero target

**Strategy and financial planning**

☑ Shareholder approval of climate transition plan

☑ Achievement of climate transition plan

☑ Other strategy and financial planning-related metrics, please specify

### (4.5.1.4) Incentive plan the incentives are linked to

☑ Both Short-Term and Long-Term Incentive Plan, or equivalent

### (4.5.1.5) Further details of incentives

*For FY23, key performance indicators (KPIs) relating to the progress towards achieving IPL's short- and medium-term strategic GHG reduction objectives were incorporated under a separate Sustainability and Climate Change component (10%) of 'at risk' STI objectives for all Executive KMP. These included KPIs relating to incorporation of decarbonisation objectives into IPL's business strategy, advancement of major capex related decarbonisation projects and scope 3 strategy development. With the practical and technological challenges related to reducing GHG emissions in the longer-term, a climate change related performance condition (10%) was introduced in the LTI Performance Rights Plan 2021/24 (LTI 2021/24) as an additional 'at risk' metric. This performance condition measures the Company's organisational performance against its climate change strategy, progress towards IPL's operational GHG emission reduction targets (announced in 2021),* *and its development of a scope 3 GHG emissions reduction strategy. Key success will be driven by material progress against longer-term objectives attached to the Moranbah N2O GHG abatement project and the Waggaman CO2 sequestration project. The climate change performance condition within the LTI 2022/25 is focused on demonstrating material progress towards IPL's GHG reduction targets (and identified pathway) and scope 3 emission reduction strategy. Progress is focused on the following areas: » Moranbah N2O tertiary abatement project » Waggaman permanent geological CO2 sequestration project » Louisiana, Missouri N2O abatement project » Gibson Island Green Ammonia Project in partnership with FFI. The performance period for the LTI 2021/24 Plan is 1 October 2021 to 30 September 2024 and is 1 October 2022 to 30 September 2025 for the LTI 2022/25 Plan. After expiry of the relevant performance period, the Board determines whether the performance conditions of the LTI Plan are satisfied based on testing of the performance measures at the end of the relevant performance period. To the extent that the performance conditions are satisfied during the performance period, the performance rights will vest or lapse.*

## (4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

*These objectives were designed to align with IPL's overall sustainability and climate change management strategies, and to focus each executive on the key short-term objectives within their area of influence that contribute towards IPL's longer-term milestones. To address the challenges and opportunities associated with climate change, and specifically, GHG emission reductions, the FY23 STI for executives included performance conditions relating to the progression of operational GHG reduction projects and the further development of pathways to Net Zero. These were in the STI under "Delivery of various Climate change related projects (10%). For the CFO, these included "Develop and implement investment criteria for ESG decisions: Embed effective capital allocation framework in line with ESG objectives." in FY23, Projects were achieved between target and stretch result (15%): ESG criteria have been approved and incorporated into the financial analysis of capital projects, including carbon price. Capital allocation criteria approved and applied for all sustainability projects. In assessing the overall outcome the Board also considered the CFO's contribution to the achievement of key milestones on operating emission reduction projects in the STI objectives of the former MD&CEO. This included CCS at Waggaman, Louisiana ammonia plant and the tertiary nitrous oxide (N2O) abatement projects at LOMO and Moranbah ammonium nitrate manufacturing facilities. For the BU Presidents, Progress was made against individual climate change objectives and delivered a threshold outcome for one president, and the other delivered outstanding outcomes against his individual climate change metrics (see page 68 of the 2023 IPL Annual Report)*

### Climate change

## (4.5.1.1) Position entitled to monetary incentive

**Board or executive level**

☑ Other C-Suite Officer, please specify: Chief HSE and Operations Excellence Officer (previously the President Global Manufacturing & HSE)

## (4.5.1.2) Incentives

*Select all that apply*

☑ Bonus - % of salary

## (4.5.1.3) Performance metrics

**Targets**

☑ Progress towards environmental targets

☑ Achievement of environmental targets

**Emission reduction**

☑ Implementation of an emissions reduction initiative

## (4.5.1.4) Incentive plan the incentives are linked to

*Select from:*

☑ Both Short-Term and Long-Term Incentive Plan, or equivalent

## (4.5.1.5) Further details of incentives

*For FY23, key performance indicators (KPIs) relating to the progress towards achieving IPL's short- and medium-term strategic GHG reduction objectives were incorporated under a separate Sustainability and Climate Change component (10%) of 'at risk' STI objectives for all Executive KMP. These included KPIs relating to incorporation of decarbonisation objectives into IPL's business strategy, advancement of major capex related decarbonisation projects and scope 3 strategy development.*

*With the practical and technological challenges related to reducing GHG emissions in the longer-term, a climate change related performance condition (10%) was introduced in the LTI Performance Rights Plan 2021/24 (LTI 2021/24) as an additional 'at risk' metric. This performance condition measures the Company's organisational performance against its climate change strategy, progress towards IPL's operational GHG emission reduction targets (announced in 2021), and its development of a scope 3 GHG emissions reduction strategy. Key success will be driven by material progress against longer-term objectives attached to the Moranbah N2O GHG abatement project and the Waggaman CO2 sequestration project. The climate change performance condition within the LTI 2022/25 is focused on demonstrating material progress towards IPL's GHG reduction targets (and identified pathway) and scope 3 emission reduction strategy. Progress is focused on the following areas:*
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*The performance period for the LTI 2021/24 Plan is 1 October 2021 to 30 September 2024 and is 1 October 2022 to 30 September 2025 for the LTI 2022/25 Plan. After expiry of the relevant performance period, the Board determines whether the performance conditions of the LTI Plan are satisfied based on testing of the performance measures at the end of the relevant performance period. To the extent that the performance conditions are satisfied during the performance period, the performance rights will vest or lapse.*

## (4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

*These objectives were designed to align with IPL's overall sustainability and climate change management strategies, and to focus each executive on the key short-term objectives within their area of influence that contribute towards IPL's longer-term milestones. To address the challenges and opportunities associated with climate change, and specifically, GHG emission reductions, the FY23 STI for executives included performance conditions relating to the progression of operational GHG reduction projects and the further development of pathways to Net Zero. These were in the STI under "Delivery of various Climate change related projects (10%). For the Chief HSE and Operations Excellence Officer (previously the President Global Manufacturing & HSE) there was also an additional Health, Safety & Environment Balanced Scorecard (10%) which included Lag Indicators: Personal Safety; Process Safety; Environmental Incidents. There were no significant Environmental Incidents for the third year running in FY23 (See pages 67-68 of the 2023 IPL Annual Report).*

### Climate change

## (4.5.1.1) Position entitled to monetary incentive

**Board or executive level**

☑ President

## (4.5.1.2) Incentives

☑ Bonus - % of salary

## (4.5.1.3) Performance metrics

**Targets**

☑ Progress towards environmental targets

☑ Reduction in absolute emissions in line with net-zero target

**Strategy and financial planning**

☑ Achievement of climate transition plan

**Emission reduction**

☑ Implementation of an emissions reduction initiative

## (4.5.1.4) Incentive plan the incentives are linked to

☑ Both Short-Term and Long-Term Incentive Plan, or equivalent

## (4.5.1.5) Further details of incentives

*For FY23, key performance indicators (KPIs) relating to the progress towards achieving IPL's short- and medium-term strategic GHG reduction objectives were incorporated under a separate Sustainability and Climate Change component (10%) of 'at risk' STI objectives for all Executive KMP. These included:*
*1. Continued integration of decarbonisation objectives into IPL's business strategy:*
*2. KPIs related to the advancement of a green ammonia manufacturing opportunity at Gibson Island, Queensland in partnership with Fortescue Future Industries (FFI): During FY23, this project progressed through Front End Engineering Design (FEED) stage, supported by a A13.7m Australian Renewable Energy Agency (ARENA) grant from the Australian Federal Government, with the aim of reaching a final investment decision before the end of the 2023 calendar year.*
*3. KPIs related to the Moranbah, Queensland tertiary N2 O GHG abatement project: Front end loading (FEL) 3 was completed during FY23 following the approval of full funding by the Board in FY22, with installation targeted for FY24.*
*4. KPIs related to the Louisiana, Missouri (LOMO) tertiary N2 O abatement project: This project progressed through FEED this year, with final investment decision approved by the Board in August 2023, and installation targeted for 2025.*
*5. KPIs related to permanent geological sequestration of the pure carbon dioxide (CO2) stream from the Waggaman, Louisiana ammonia plant, including the signing of a binding Memorandum of Understanding with a third party to transport and sequester the CO2 contingent on the divestment timeline for this asset: This project completed FEED stage in FY23. Development of the approach to project permitting and community engagement has begun ahead of Capex approval by the Board.*
*6. KPIs related to progress on technology solutions to reduce GHG emissions: During FY23, these included completion of assurance of the results of a 12-month trial conducted in partnership with a mining customer, which showed a reduction in GHG emissions using Dyno Nobel's Delta E technology, the development of an electric MPU and solar charging station for mining customers, and investigations into the potential to use waste mine gas for manufacturing. 7. KPIs related to progressing scope 3 emissions management strategies: these related to the integration of key suppliers and customers in the scope 3 strategies of our business units.*

## (4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

*These objectives were designed to align with IPL's overall sustainability and climate change management strategies, and to focus each executive on the key short-term objectives within their area of influence that contribute towards IPL's longer-term milestones. To address the challenges and opportunities associated with climate change, and specifically, GHG emission reductions, the FY23 STI for executives included performance conditions relating to the progression of operational GHG reduction projects and the further development of pathways to Net Zero. These were in the STI under "Delivery of various Climate change related projects (10%). For the CFO, these included "Develop and implement investment criteria for ESG decisions: Embed effective capital allocation framework in line with ESG objectives." in FY23, Projects were achieved between target and stretch result (15%): ESG criteria have been approved and incorporated into the financial analysis of capital projects, including carbon price. Capital allocation criteria approved and applied for all sustainability projects. In assessing the overall outcome the Board also considered the CFO's contribution to the achievement of key milestones on operating emission reduction projects in the STI objectives of the former MD&CEO. This included CCS at Waggaman, Louisiana ammonia plant and the tertiary nitrous oxide (N2O) abatement projects at LOMO and Moranbah ammonium nitrate manufacturing facilities. For the BU Presidents, Progress was made against individual climate change objectives and delivered a threshold outcome for one president, and the other delivered outstanding outcomes against his individual climate change metrics (see page 68 of the 2023 IPL Annual Report)*

## (4.6) Does your organization have an environmental policy that addresses environmental issues?

| | Does your organization have any environmental policies? |
|---|---|
| | *Select from:*<br>☑ Yes |

## (4.6.1) Provide details of your environmental policies.

### Row 1

### (4.6.1.1) Environmental issues covered

*Select all that apply*

☑ Climate change

☑ Water

☑ Biodiversity

### (4.6.1.2) Level of coverage

☑ Organization-wide

### (4.6.1.3) Value chain stages covered

☑ Direct operations

### (4.6.1.4) Explain the coverage

*The policy applies to all IPL owned and operated operations globally. There are no exclusions based on geographical areas, business activities*

## (4.6.1.5) Environmental policy content

**Environmental commitments**

☑ Commitment to comply with regulations and mandatory standards

☑ Commitment to take environmental action beyond regulatory compliance

☑ Other environmental commitment, please specify :• Promote the efficient use of resources and energy. • Identify and assess hazards to the environment and control them as part of a total risk management process. • Strive to minimise our impact on the environment, including minimising our GHG.

## (4.6.1.6) Indicate whether your environmental policy is in line with global environmental treaties or policy goals

☑ No, and we do not plan to align in the next two years

## (4.6.1.7) Public availability

☑ Publicly available

## (4.6.1.8) Attach the policy

*IPL_HSEC Policy and Management System.pdf*

### Row 2

## (4.6.1.1) Environmental issues covered

☑ Climate change

## (4.6.1.2) Level of coverage

☑ Organization-wide

## (4.6.1.3) Value chain stages covered

☑ Direct operations

## (4.6.1.4) Explain the coverage

*The policy applies to all IPL owned and operated operations globally. There are no exclusions based on geographical areas, business activities*

## (4.6.1.5) Environmental policy content

**Climate-specific commitments**

☑ Commitment to net-zero emissions

☑ Other climate-related commitment, please specify

**Social commitments**

☑ Other social commitment, please specify :Just Transition

**Additional references/Descriptions**

☑ Reference to timebound environmental milestones and targets

## (4.6.1.6) Indicate whether your environmental policy is in line with global environmental treaties or policy goals

☑ Yes, in line with the Paris Agreement

## (4.6.1.7) Public availability

☑ Publicly available

## (4.6.1.8) Attach the policy

*IPL Climate Change Policy_2019.pdf See* [IPL Climate Change Policy_Board Approval (incitecpivot.com.au)]

# (4.10) Are you a signatory or member of any environmental collaborative frameworks or initiatives?

## (4.10.1) Are you a signatory or member of any environmental collaborative frameworks or initiatives?

☑ Yes

## (4.10.2) Collaborative framework or initiative

☑ Carbon Market Institute

☑ The B Team

☑ UN Global Compact

☑ Other, please specify: Australian Industry Greenhouse Network (AIGN)

## (4.10.3) Describe your organization’s role within each framework or initiative

*IPL is an active member of Member of the UN Global Compact, with our employees having undertaken the UNGC Climate Ambition Accelerator and attending the Global Compact Australia Human Rights Working Group. Our CEO was a founding member of the Australian B Team Climate Leaders Coalition (CLC) and we have participated in several working groups and Case Studies, including on Scope 3 throughout the natural gas supply chain. We are an active member of the Carbon Market Institute and Australian Industry Greenhouse Network, attending meetings and contributing to consultation papers on issues including sector based GHG reduction pathways and the development of carbon markets.*

### (4.11) In the reporting year, did your organization engage in activities that could directly or indirectly influence policy, law, or regulation that may (positively or negatively) impact the environment?

## (4.11.1) External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the environment

☑ Yes, we engaged directly with policy makers

☑ Yes, we engaged indirectly through, and/or provided financial or in-kind support to a trade association or other intermediary organization or individual whose activities could influence policy, law, or regulation

## (4.11.2) Indicate whether your organization has a public commitment or position statement to conduct your engagement activities in line with global environmental treaties or policy goals

☑ No, and we do not plan to have one in the next two years

## (4.11.5) Indicate whether your organization is registered on a transparency register

☑ No

## (4.11.8) Describe the process your organization has in place to ensure that your external engagement activities are consistent with your environmental commitments and/or transition plan

*Industry associations provide IPL with the opportunity to collaborate with other companies and organisations to share best practice across the sectors in which our businesses operate, including issues such as technical standards, industry-wide regulations and our number-one priority – safety. This helps us to become better informed on a wide range of issues that directly impact our businesses, our employees and our customers. Since industry associations represent a collective group, an industry association's position on a given topic will incorporate a range of members' views. In some cases, this may result in associations holding no position on that topic, or holding a position which may differ to the position held by IPL. For this reason, we communicate our own views through our policies and public statements, including those made in published submissions and executive speeches.*

*Each year IPL commissions an independent review of the alignment between our climate change policies and those of the industry associations of which we are a member, which form part of our ongoing industry association monitoring activities. This year, IPL introduced a new method that we believe will cater to those important stakeholders and provide transparency for our shareholders. As part of the 2023 review, IPL formalised a framework for governance of our memberships of associations, including guidance where a difference in publicly stated climate change policy has been identified. This enables an open dialogue between IPL and the industry association, including an exchange of information on any identified difference.*

*In 2023, the review assessed the alignment between IPL and the energy and climate change positions of 19 Member Associations in the following areas:*
*1. The Paris Agreement*
*2. Climate Change Policy including:*
*(a) a Net Zero target and interim emissions reduction targets;*
*(b) an understanding that climate change may impact on core business offerings (including product portfolio);*
*(c) a stated commitment to partner with stakeholders (including regulators) to promote climate action;*
*(d) programs to engender 'resilience' or 'adaptation' to climate impacts for its business and stakeholders; and*
*(e) Consideration of climate risk in policy or position statements.*
*3. Energy Policy, including supportive statements for renewable energy deployment and investment into the expansion of renewable and reliable energy sources*

## (4.11.1) On what policies, laws, or regulations that may (positively or negatively) impact the environment has your organization been engaging directly with policy makers in the reporting year?

### Row 1

## (4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

*Safeguard Mechanism*

## (4.11.1.2) Environmental issues the policy, law, or regulation relates to

☑ Climate change

## (4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

**Financial mechanisms (e.g., taxes, subsidies, etc.)**

☑ Carbon offsets

☑ Emissions trading schemes

☑ Subsidies for low-carbon, non-renewable energy projects

☑ Subsidies for renewable energy projects

## (4.11.1.4) Geographic coverage of policy, law, or regulation

☑ National

## (4.11.1.5) Country/area/region the policy, law, or regulation applies to

☑ Australia

## (4.11.1.6) Your organization's position on the policy, law, or regulation

☑ Neutral

## (4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

☑ Ad-hoc meetings

☑ Discussion in public forums

☑ Responding to consultations

☑ Submitting written proposals/inquiries

## (4.11.1.9) Funding figure your organization provided to policy makers in the reporting year relevant to this policy, law, or regulation (currency)

*0*

## (4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

*The Safeguard Mechanism is an ETS which assigns facility specific limits on GHG intensity (scope 1 GHG per tonne of production) based on historical emissions, decreasing each year. If a facility emits below that baseline, intensity credits are granted. Exceedances accrue a liability, which is required to be settled via surrender of credits. This financially incentivises GHG reductions which, for IPL, relate to the major Australian capex projects identified in our Net Zero Pathway, including Tertiary N2O Abatement at Moranbah, green hydrogen/ammonia projects, and solar to replace gas fired power plants at two facilities.*

*Engagement with the Clean Energy Regulator on the Safeguard Mechanism during the reporting year included aspects relating to ensuring compliance, consultations on the design of various Safeguard rules and instruments, accessing funding offered under the Powering the Regions Fund to assist us with funding our decarbonisation projects described above as well as energy efficiency projects, and the development of a potential method to quantify the GHG reductions associated with customer use of our Enhanced Efficiency Fertiliser products. The success of the engagement will be assessed by the success of our compliance, grant applications and method development progress.*

## (4.11.1.11) Indicate if you have evaluated whether your organization’s engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

☑ No, we have not evaluated

**(4.11.2) Provide details of your indirect engagement on policy, law, or regulation that may (positively or negatively) impact the environment through trade associations or other intermediary organizations or individuals in the reporting year.**

### Row 1

## (4.11.2.1) Type of indirect engagement

☑ Indirect engagement via a trade association

## (4.11.2.4) Trade association

**Asia and Pacific**

☑ Business Council of Australia

## (4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

☑ Climate change

## (4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

☑ Consistent

## (4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

☑ No, we did not attempt to influence their position

### (4.11.2.8) Describe how your organization’s position is consistent with or differs from the organization or individual’s position, and any actions taken to influence their position

*In 2023, the review assessed the alignment between IPL and the energy and climate change positions of BCA in the following areas:*
*1. The Paris Agreement*
*2. Climate Change Policy including:*
*(a) a Net Zero target and interim emissions reduction targets;*
*(b) an understanding that climate change may impact on core business offerings (including product portfolio);*
*(c) a stated commitment to partner with stakeholders (including regulators) to promote climate action;*
*(d) programs to engender ‘resilience’ or ‘adaptation’ to climate impacts for its business and stakeholders; and*
*(e) Consideration of climate risk in policy or position statements.*
*3. Energy Policy, including supportive statements for renewable energy deployment and investment into the expansion of renewable and reliable energy sources.*
*BCA’s position on climate change and energy is closely aligned with IPL’s. In 2021, BCA publicly committed to supporting Australia’s commitments under the Paris Agreement. It publicly calls for stronger policy commitments relating to both GHG reduction and greenhouse and energy reporting. A BCA paper released in 2023 proposes a comprehensive target setting framework that takes into consideration domestic, international, economic and non-economic matters and calls for decarbonisation pathways for all sectors of the economy. The only funding provided to BCA by IPL is the annual membership fee.*

### (4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

*A$64,159.2*

### (4.11.2.10) Describe the aim of this funding and how it could influence policy, law or regulation that may impact the environment

*Membership Fee only. This may influence policy, law or regulation to the extent that this organisation is successful in its participation in lobbying.*

### (4.11.2.11) Indicate if you have evaluated whether your organization’s engagement is aligned with global environmental treaties or policy goals

☑ Yes, we have evaluated, and it is aligned

### (4.11.2.12) Global environmental treaties or policy goals aligned with your organization’s engagement on policy, law or regulation

☑ Paris Agreement

### Row 2

## (4.11.2.1) Type of indirect engagement

☑ Indirect engagement via a trade association

## (4.11.2.4) Trade association

**Asia and Pacific**
☑ Minerals Council of Australia

## (4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

☑ Climate change

## (4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

*Select from:*
☑ Inconsistent

## (4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

*Select from:*
☑ No, we did not attempt to influence their position

## (4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

*In 2023, the review assessed the alignment between IPL and the energy and climate change positions of MCA in the following areas:*
*1. The Paris Agreement*
*2. Climate Change Policy including:*
*(a) a Net Zero target and interim emissions reduction targets;*

*(b) an understanding that climate change may impact on core business offerings (including product portfolio);*
*(c) a stated commitment to partner with stakeholders (including regulators) to promote climate action;*
*(d) programs to engender 'resilience' or 'adaptation' to climate impacts for its business and stakeholders; and*
*(e) Consideration of climate risk in policy or position statements.*
*3. Energy Policy, including supportive statements for renewable energy deployment and investment into the expansion of renewable and reliable energy sources.*

*MCA publishes an annual progress report to their Climate Action Plan released in 2020. In their 2022 Progress Report, MCA reported its continued commitment to the Paris Agreement and its goal of Net Zero emissions by 2050. However, it continues to advocate for the use of coal whilst also advocating against scope 3 legislative reforms, indicating its views are less progressive than IPL. The only funding provided to MCA is the annual membership fee.*

## (4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

*A$31,881.62*

## (4.11.2.10) Describe the aim of this funding and how it could influence policy, law or regulation that may impact the environment

*Membership Fee only. This may influence policy, law or regulation to the extent that this organisation is successful in its participation in lobbying.*

## (4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

☑ Yes, we have evaluated, and it is not aligned

### Row 3

## (4.11.2.1) Type of indirect engagement

☑ Indirect engagement via a trade association

## (4.11.2.4) Trade association

**North America**
☑ National Mining Association

## (4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

☑ Climate change

## (4.11.2.6) Indicate whether your organization’s position is consistent with the organization or individual you engage with

☑ Inconsistent

## (4.11.2.7) Indicate whether your organization attempted to influence the organization or individual’s position in the reporting year

☑ No, we did not attempt to influence their position

## (4.11.2.8) Describe how your organization’s position is consistent with or differs from the organization or individual’s position, and any actions taken to influence their position

*In 2023, the review assessed the alignment between IPL and the energy and climate change positions of NMA in the following areas:*

*1. The Paris Agreement*

*2. Climate Change Policy including:*
*(a) a Net Zero target and interim emissions reduction targets;*

*(b) an understanding that climate change may impact on core business offerings (including product portfolio);*
*(c) a stated commitment to partner with stakeholders (including regulators) to promote climate action;*
*(d) programs to engender 'resilience' or 'adaptation' to climate impacts for its business and stakeholders; and*
*(e) Consideration of climate risk in policy or position statements.*

*3. Energy Policy, including supportive statements for renewable energy deployment and investment into the expansion of renewable and reliable energy sources.*

*The NMA recognises that mining is an energy-intensive industry, and that global action is needed to reduce GHG and help mitigate the adverse effects of human impacts on climate change. The NMA has recently published a position on Climate Change, but its views can still be considered less progressive than those of IPL due to continued support of thermal coal. The only funding provided to NMA is the annual membership fee.*

## (4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

*A$33,693.25*

## (4.11.2.10) Describe the aim of this funding and how it could influence policy, law or regulation that may impact the environment

*Membership Fee only. This may influence policy, law or regulation to the extent that this organisation is successful in its participation in lobbying.*

## (4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

☑ Yes, we have evaluated, and it is not aligned

### Row 5

## (4.11.2.1) Type of indirect engagement

☑ Indirect engagement via a trade association

## (4.11.2.4) Trade association

**Asia and Pacific**
☑ Other trade association in Asia and Pacific, please specify: Carbon Market Institute

## (4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

☑ Climate change

## (4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

☑ Consistent

## (4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

☑ No, we did not attempt to influence their position

## (4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

*In 2023, the review assessed the alignment between IPL and the energy and climate change positions of CMI in the following areas:*

*1. The Paris Agreement*
*2. Climate Change Policy including:*
*(a) a Net Zero target and interim emissions reduction targets;*
*(b) an understanding that climate change may impact on core business offerings (including product portfolio);*

*(c) a stated commitment to partner with stakeholders (including regulators) to promote climate action;*
*(d) programs to engender 'resilience' or 'adaptation' to climate impacts for its business and stakeholders; and*
*(e) Consideration of climate risk in policy or position statements.*

*3. Energy Policy, including supportive statements for renewable energy deployment and investment into the expansion of renewable and reliable energy sources. CMI's position on climate change and energy is closely aligned with IPL's. CMI is publicly supportive of the Paris Agreement and the emerging framework of climate and net-zero emissions goals and mechanisms for increasing ambition, internal cooperation and investment.*

*CMI's 2020 Strategy and 2021 Policy Advocacy Position Statement remain key public documents which highlight CMI's position on energy and climate change which has not changed since the last review in 2022. At the end of 2022, CMI published a 2025 Strategy titled 'Accelerating climate action', which aims to enhance business investment in response to the climate and biodiversity crises. It also calls for reinforcement of public policy and private investment to keep the 1.5$^{o}$C goal alive. The only funding provided to this association is the annual membership fee.*

## (4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

*A$6856.58*

## (4.11.2.10) Describe the aim of this funding and how it could influence policy, law or regulation that may impact the environment

*Membership Fee only. This may influence policy, law or regulation to the extent that this organisation is successful in its participation in lobbying.*

## (4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

☑ Yes, we have evaluated, and it is aligned

## (4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

☑ Paris Agreement

### Row 6

## (4.11.2.1) Type of indirect engagement

☑ Indirect engagement via a trade association

## (4.11.2.4) Trade association

**Asia and Pacific**

☑ Other trade association in Asia and Pacific, please specify: Australian Industry Greenhouse Network

## (4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

☑ Climate change

## (4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

☑ Consistent

## (4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

☑ No, we did not attempt to influence their position

## (4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

*In 2023, the review assessed the alignment between IPL and the energy and climate change positions of AIGN in the following areas:*

*1. The Paris Agreement*
*2. Climate Change Policy including:*
*(a) a Net Zero target and interim emissions reduction targets;*
*(b) an understanding that climate change may impact on core business offerings (including product portfolio);*

*(c) a stated commitment to partner with stakeholders (including regulators) to promote climate action;*
*(d) programs to engender 'resilience' or 'adaptation' to climate impacts for its business and stakeholders; and*
*(e) Consideration of climate risk in policy or position statements.*

*3. Energy Policy, including supportive statements for renewable energy deployment and investment into the expansion of renewable and reliable energy sources.*

*AIGN is aligned with IPL in its commitments to address climate change. AIGN acknowledges climate change and supports policies to help Australia adapt to it. AIGN and its members are actively involved in monitoring and participating in climate change policy discussions, with the goal of promoting the development of Australia's industrial resources. AIGN serves as a focal point for cooperative industry policy responses to key greenhouse issues, and it plays a facilitating and coordinating role in industry contributions to key greenhouse policy and abatement measures. The only funding provided to AIGN is the annual membership fee.*

## (4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

*A$9,973.2*

## (4.11.2.10) Describe the aim of this funding and how it could influence policy, law or regulation that may impact the environment

*Membership Fee only. This may influence policy, law or regulation to the extent that this organisation is successful in its participation in lobbying.*

## (4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

☑ Yes, we have evaluated, and it is aligned

## (4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

☑ Paris Agreement

## Row 7

### (4.11.2.1) Type of indirect engagement

☑ Indirect engagement via a trade association

### (4.11.2.4) Trade association

**Asia and Pacific**

☑ Other trade association in Asia and Pacific, please specify: B-team Climate Leaders Coalition (CLC)

### (4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

☑ Climate change

### (4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

☑ Consistent

### (4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

☑ No, we did not attempt to influence their position

### (4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

*In 2023, the review assessed the alignment between IPL and the energy and climate change positions of the B-team Climate Leaders Coalition in the following areas:*
*1. The Paris Agreement*
*2. Climate Change Policy including:*
*(a) a Net Zero target and interim emissions reduction targets;*
*(b) an understanding that climate change may impact on core business offerings (including product portfolio);*
*(c) a stated commitment to partner with stakeholders (including regulators) to promote climate action;*

*(d) programs to engender ‘resilience’ or ‘adaptation’ to climate impacts for its business and stakeholders; and*
*(e) Consideration of climate risk in policy or position statements.*
*3. Energy Policy, including supportive statements for renewable energy deployment and investment into the expansion of renewable and reliable energy sources.*

*B-team Climate Leaders Coalition has remained closely aligned with IPL in its energy and climate change positioning during 2023. CLC publicly support the Paris Agreement and Australia’s commitment to it, including the objective to keep global warming to well below 2 degrees above pre-industrial levels. The CLC is also advocating for policies that support the transition to a low carbon economy. The CLC’s members are united in their commitment to reducing GHG emissions and are working together to develop and implement plans to achieve their GHG reduction targets. The only funding provided to AIGN is the annual membership fee.*

## (4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

*A$10,110.45*

## (4.11.2.10) Describe the aim of this funding and how it could influence policy, law or regulation that may impact the environment

*Membership Fee only. This may influence policy, law or regulation to the extent that this organisation is successful in its participation in lobbying.*

## (4.11.2.11) Indicate if you have evaluated whether your organization’s engagement is aligned with global environmental treaties or policy goals

☑ Yes, we have evaluated, and it is aligned

## (4.11.2.12) Global environmental treaties or policy goals aligned with your organization’s engagement on policy, law or regulation

☑ Paris Agreement

### (4.12) Have you published information about your organization’s response to environmental issues for this reporting year in places other than your CDP response?

☑ Yes

### (4.12.1) Provide details on the information published about your organization’s response to environmental issues for this reporting year in places other than your CDP response. Please attach the publication.

#### Row 1

#### (4.12.1.1) Publication

☑ In mainstream reports, in line with environmental disclosure standards or frameworks

#### (4.12.1.2) Standard or framework the report is in line with

☑ TCFD

#### (4.12.1.3) Environmental issues covered in publication

☑ Climate change
☑ Water

#### (4.12.1.4) Status of the publication

☑ Complete

#### (4.12.1.5) Content elements

☑ Strategy
☑ Governance
☑ Emission targets
☑ Value chain engagement
☑ Content of environmental policies

☑ Emissions figures

☑ Risks & Opportunities

## (4.12.1.6) Page/section reference

*See the 2023 IPL Climate Change Report, page 65 (page 34 of the pdf) for our TCFD disclosures table, which directs the reader to TCFD aligned disclosures on Governance, Strategy, Risks and Opportunities and Metrics and Targets.*

## (4.12.1.7) Attach the relevant publication

*IPL_CCR23_web_Spread_FINAL.pdf*

## (4.12.1.8) Comment

*Our 2023 Climate Change Report is attached and is TCFD aligned.*

### Row 2

## (4.12.1.1) Publication

☑ In mainstream reports, in line with environmental disclosure standards or frameworks

## (4.12.1.2) Standard or framework the report is in line with

☑ GRI

☑ TNFD

## (4.12.1.3) Environmental issues covered in publication

☑ Climate change

☑ Water

☑ Biodiversity

## (4.12.1.4) Status of the publication

☑ Complete

## (4.12.1.5) Content elements

☑ Strategy
☑ Governance
☑ Risks & Opportunities
☑ Value chain engagement
☑ Dependencies & Impacts
☑ Water accounting figures
☑ Water pollution indicators
☑ Content of environmental policies
☑ Other, please specify:
**Water management strategies at sites where water is material issue**

## (4.12.1.6) Page/section reference

*See the 2023 IPL Sustainability Report under 'Navigating the decarbonisation transition and reducing our GHG' on pages 37-40 and 64.*
*See under 'Where water is a material issue' on pages 40-41 (Dyno Nobel) and under 'Sustainable use of water' on pages 64-65 (IPF).*
*See pages 61-63 under 'Soil Health and Biodiversity' for our strategy and products to improve and protect soil health and biodiversity.*
*See pages 68-77 for a summary of the TNFD Assessment for our IPF business.*

## (4.12.1.7)  Attach the relevant publication

*IPL_SR23_ASX_Single_FINAL.pdf*

## (4.12.1.8) Comment

*Our 2023 Sustainability Report is GRI aligned and contains a summary of the results of our TNFD LEAP assessment.*

### Row 3

## (4.12.1.1) Publication

☑ In mainstream reports, in line with environmental disclosure standards or frameworks

## (4.12.1.2) Standard or framework the report is in line with

☑ GRI
☑ Other, please specify: SASB

## (4.12.1.3) Environmental issues covered in publication

☑ Climate change
☑ Water
☑ Biodiversity

## (4.12.1.4) Status of the publication

☑ Complete

## (4.12.1.5) Content elements

☑ Strategy
☑ Governance
☑ Emission targets
☑ Emissions figures
☑ Risks & Opportunities
☑ Water accounting figures
☑ Water pollution indicators
☑ Content of environmental policies
☑ Other, please specify: **SASB Aligned metrics**

## (4.12.1.6) Page/section reference

*See the 2023 IPL GRI and Data Supplement, GRI and SASB tables on pages 1-13 and 24-27.*

## (4.12.1.7) Attach the relevant publication

*IPL_23 GRI Index and Data Supplement.pdf*

## (4.12.1.8) Comment

*Our GRI Index and Data Supplement also contains a SASB Index table.*

## C5. Business strategy

### (5.1) Does your organization use scenario analysis to identify environmental outcomes?

### Climate change

### (5.1.1) Use of scenario analysis

☑ Yes

### (5.1.2) Frequency of analysis

☑ Every three years or less frequently

### Water

### (5.1.1) Use of scenario analysis

☑ Yes

### (5.1.2) Frequency of analysis

☑ Every three years or less frequently

### (5.1.1) Provide details of the scenarios used in your organization's scenario analysis.

### Climate change

### (5.1.1.1) Scenario used

**Physical climate scenarios**

☑ Bespoke physical climate scenario

## (5.1.1.3) Approach to scenario

☑ Qualitative and quantitative

## (5.1.1.4) Scenario coverage

☑ Organization-wide

## (5.1.1.5) Risk types considered in scenario

☑ Policy
☑ Market
☑ Liability
☑ Reputation
☑ Technology
☑ Acute physical
☑ Chronic physical

## (5.1.1.6) Temperature alignment of scenario

☑ 4.0ºC and above

## (5.1.1.7) Reference year

*2020*

## (5.1.1.8) Timeframes covered

☑ 2025
☑ 2030
☑ 2040
☑ 2050

## (5.1.1.9) Driving forces in scenario

**Local ecosystem asset interactions, dependencies and impacts**

☑ Changes to the state of nature

☑ Changes in ecosystem services provision

☑ Speed of change (to state of nature and/or ecosystem services)

☑ Climate change (one of five drivers of nature change)

**Regulators, legal and policy regimes**

☑ Global regulation

☑ Political impact of science (from galvanizing to paralyzing)

☑ Level of action (from local to global)

☑ Global targets

**Relevant technology and science**

☑ Other relevant technology and science driving forces, please specify**:** Development of green ammonia

**Direct interaction with climate**

☑ On asset values, on the corporate

**Macro and microeconomy**

☑ Domestic growth

☑ Globalizing markets

## (5.1.1.10) Assumptions, uncertainties and constraints in scenario

*In the reports of the IPCC, the RCP 8.5 is used synonymously with a BAU scenario that would lead to an estimated global mean temperature increase of 4.3ºC relative to preindustrial levels. External specialists used this scenario to create IPL's bespoke Scenario D: Current Trajectory (3 Degrees) in conjunction with the following:*

- *IIASA, SSP Database (Version 2.0 December 2018), the IEA (2021);*
- *The Role of Critical Minerals in Clean Energy Transitions, May 2021;*
- *WEF (2021) How a 4 Degree temperature rise will affect people around the world. Climate Change, January 2021;*
- *UNPRI (2021) The Inevitable Policy Response: Forecast Policy Scenario Summary;*

- *the U.S. EIA (2021) EIA Annual Energy Outlook 2021;*
- *AEMO (2020) Integrated System Plan 2020;*
- *AEMO (2021) Gas Statement of Opportunities, March 2021; and*
- *the BloombergNEF (2020), Hydrogen Economy Outlook: Key Messages, among other references.*

*Our bespoke Scenario D: Current Trajectory (3 Degrees) describes a future resulting from current, business-as-usual policies which lead to significant global warming and increased exposure to physical risks. Carbon pricing is applied only in some geographies. In this scenario by 2030, there is a global 100% increase in the frequency of extreme heat events over land and by 2040 severe weather systems become significantly more intense. In some regions, water stress begins to impact cities and industrial processes and sectors which rely on water. GHG do not peak globally until around 2050.*

*Physical impacts cause massive disruptions to global supply chains and economies. Extreme weather combined with sea level rise damages industry and infrastructure located near coastlines. Current trends in renewable electricity generation uptake continue, however fossil fuels remain the dominant source of primary energy. Global coal and US natural gas consumption grows, increasing by 25% from 2025 to 2050. In Australia, trade in LNG continues to grow and there are shortfalls in supply. Transition risks are not as prevalent due to lack of policies, but substantial physical impacts over the medium to long term are socially and economically devastating, resulting in business disruption, damage to property and infrastructure, and significant impacts to global supply chains. Increased temperatures, sea level rise and precipitation changes affect labour, capital and agricultural productivity, and cause operational and raw material disruptions to key industries. Geopolitical conflict results.*

## (5.1.1.11) Rationale for choice of scenario

*IPL's integrated risk assessment process makes use of IPL-specific future climate-related scenarios which are updated every three years, as mandated by the charter of the Audit and Risk Management Committee of the Board. An expert third party is engaged to update the scenarios using the most recently available climate-related information including Assessment Reports and Representative Concentration Pathways (RCPs) from the Intergovernmental Panel on Climate Change, New Energy Outlooks from BloombergNEF and Shared Socioeconomic Pathways (SSP), along with a range of scientific and consultancy papers relevant to our businesses and geographical locations.*

*The RCP 8.5 scenario was used in creating IPL's bespoke 3ºC Scenario to assess physical risks which may impact our own operations, our suppliers, logistics, and customer demand for our products and services across each business unit, as well as to assess physical risks which may impact on our 12 major manufacturing facilities, and on their suppliers, logistics and customer demand at the facility level.*

*The rational for using RCP8.5 is to assess a 'worst case scenario' impact: a future with little curbing of emissions, with a CO2 concentration continuing to rapidly rise, reaching 940 ppm by 2100. It should be noted that water related impacts are also included in this assessment, however, it is not possible to select both water and climate change together in column 1 of this report.*

## Water

## (5.1.1.1) Scenario used

**Water scenarios**

☑ WRI Aqueduct

## (5.1.1.3) Approach to scenario

☑ Qualitative

## (5.1.1.4) Scenario coverage

☑ Organization-wide

## (5.1.1.5) Risk types considered in scenario

☑ Acute physical

☑ Chronic physical

## (5.1.1.7) Reference year

*2020*

## (5.1.1.8) Timeframes covered

☑ 2025

☑ 2030

☑ 2040

☑ 2050

## (5.1.1.9) Driving forces in scenario

**Local ecosystem asset interactions, dependencies and impacts**

☑ Climate change (one of five drivers of nature change)

## (5.1.1.10) Assumptions, uncertainties and constraints in scenario

*Aqueduct tools use open-source, peer-reviewed data to map water risks such as floods, droughts, and water stress, both currently and in the future. Aqueduct tools include the Aqueduct Water Risk Atlas, which maps and analyzes current and future water risks across locations; Aqueduct Country Rankings, which allows decision-makers to understand and compare national and subnational water risks; Aqueduct Food, which identifies current and future water risks to agriculture and food security; and Aqueduct Floods, which identifies coastal and riverine flood risks, and analyzes the costs and benefits of investing in flood protection.*

*The use of these tools resulted in the following water risk mapping and future assumptions: Current baseline water stress is High (40-80%) in the catchments in which our Gibson Island, Helidon and Geelong sites are located and groundwater table decline is high (4-8cm/year) for our Cheyenne site; baseline water stress will increase in the catchments where our Cheyenne, Gibson Island, Geelong, Helidon, Mt Isa and Cheyenne sites are located by 2030 and again by 2040. In relation to our TNFD LEAP assessment, water risks were mapped more closely for our Geelong and Cairns sites, with risks confirmed for the former site.*

## (5.1.1.11) Rationale for choice of scenario

*WRI Aqueduct was used due to its use of open-source, peer-reviewed data to map water risks such as floods, droughts, and water stress, both currently and in the future.*

# Climate change

## (5.1.1.1) Scenario used

**Physical climate scenarios**

☑ Bespoke physical climate scenario

## (5.1.1.3) Approach to scenario

☑ Qualitative and quantitative

## (5.1.1.4) Scenario coverage

☑ Organization-wide

## (5.1.1.5) Risk types considered in scenario

☑ Policy
☑ Market
☑ Liability
☑ Reputation
☑ Technology
☑ Acute physical
☑ Chronic physical

## (5.1.1.6) Temperature alignment of scenario

☑ 3.0°C - 3.4°C

## (5.1.1.7) Reference year

*2020*

## (5.1.1.8) Timeframes covered

☑ 2025
☑ 2030
☑ 2040
☑ 2050

## (5.1.1.9) Driving forces in scenario

**Local ecosystem asset interactions, dependencies and impacts**

☑ Changes to the state of nature
☑ Changes in ecosystem services provision
☑ Speed of change (to state of nature and/or ecosystem services)
☑ Climate change (one of five drivers of nature change)

**Regulators, legal and policy regimes**

☑ Global regulation

☑ Political impact of science (from galvanizing to paralyzing)

☑ Level of action (from local to global)

☑ Global targets

**Relevant technology and science**

☑ Other relevant technology and science driving forces, please specify**:** Development of green ammonia

**Direct interaction with climate**

☑ On asset values, on the corporate

**Macro and microeconomy**

☑ Domestic growth

☑ Globalizing markets

## (5.1.1.10) Assumptions, uncertainties and constraints in scenario

*RCP 6.0 was used by external specialists to construct IPL's bespoke 'Scenario C: Delayed Action followed by Rapid Action (Inevitable Policy Response – IPR) in conjunction with the following:*

- *The IEA SDS scenario;*
- *Poulter, J. (2021) The Inevitable Policy Response 2021: Forecasting and Aligning, Principles for Responsible Investment, Investor Brief, March 2021;*
- *Vivid Economics and Energy Transition Advisors, Inevitable Policy Response 2021 Policy Forecast Executive Summary (2021);*
- *Vivid Economics and Energy Transition Advisors (2019) The Inevitable Policy Response: Forecast Policy Scenario 2021 (IPR FPS 2021), December 2021;*
- *Principles for Responsible Investment, Forecast Policy Scenario: Macroeconomic Results (2019) and*
- *Simeone, C. (2018) The Inevitable Policy Response Theory, Kleinman Centre for Energy Policy.*

*Our 'Delayed Action scenario describes a future where delayed action results in severe physical impacts, followed by rapid action between 2025 and 2030, causing late, rapid, disorderly and unprecedented changes to the global economy. Transitional risks for IPL include localised carbon pricing schemes causing competition risks, market risks associated with a less orderly transition and, potentially, stranded assets and loss of revenue if this transition were not managed in advance.*

*Physical risks include increased hurricanes, storms and floods, periods of drought and water shortages, which could impact on IPL's operations, supply chains and customers, and an increased risk of inundation at some coastal sites. In this scenario, coal maintains 20% of primary energy, with oil and gas holding 25% each to 2030, then a rapid shift to align with a 1.5ºC scenario. Coal-fired generation decreases to 4% with CCS on any remaining. Oil falls to 7% and renewables make up almost 50%. The US, Canada and Australia are described as implementing comprehensive policies by 2030 to reduce GHGs from agriculture and phase out coal by 2030. Bioenergy crops play a significant role in the transport sector. Some countries ban new unabated (no CCS) fossil-based industrial plants by 2040. By 2050, hydrogen contributes at least 20% of energy and feedstock demand in hard-to-abate sectors, such as iron and steel, non-metallic minerals and chemicals.*

## (5.1.1.11) Rationale for choice of scenario

*IPL’s integrated risk assessment process makes use of IPL-specific future climate-related scenarios which are updated every three years, as mandated by the charter of the Audit and Risk Management Committee of the Board. An expert third party is engaged to update the scenarios using the most recently available climate-related information including Assessment Reports and Representative Concentration Pathways (RCPs) from the Intergovernmental Panel on Climate Change, New Energy Outlooks from BloombergNEF and Shared Socioeconomic Pathways (SSP), along with a range of scientific and consultancy papers relevant to our businesses and geographical locations.*

*RCP 6.0 was used to create IPL's bespoke ‘Inevitable Policy Response’ scenario in conjunction with the references outlined under ‘Assumption, uncertainties and constraints’ above. This was then used to assess physical and transitional risks which may impact our own operations, our suppliers, logistics, and customer demand for our products and services across each business unit.*

*The rationale for using these scenarios together is to arrive at a bespoke IPL Inevitable Policy Response scenario with which to assess not only physical impacts across our operations, supply chains and customer markets, but also transitional risks including carbon pricing and carbon market development; the overall economy; the development of technology; people’s consumption patterns and social structures; energy and power; agriculture and land use; mining and industry; infrastructure; and transport.*

*It should be noted that water related impacts are also included in this assessment, however, it is not possible to select both water and climate change together in column 1 of this report.*

# Climate change

## (5.1.1.1) Scenario used

**Physical climate scenarios**

☑ Bespoke physical climate scenario

## (5.1.1.3) Approach to scenario

☑ Qualitative and quantitative

## (5.1.1.4) Scenario coverage

☑ Organization-wide

## (5.1.1.5) Risk types considered in scenario

☑ Policy
☑ Market
☑ Liability
☑ Reputation
☑ Technology
☑ Acute physical
☑ Chronic physical

## (5.1.1.6) Temperature alignment of scenario

☑ 2.0ºC - 2.4ºC

## (5.1.1.7) Reference year

*2020*

## (5.1.1.8) Timeframes covered

☑ 2025
☑ 2030
☑ 2040
☑ 2050

## (5.1.1.9) Driving forces in scenario

**Local ecosystem asset interactions, dependencies and impacts**

☑ Changes to the state of nature
☑ Changes in ecosystem services provision
☑ Speed of change (to state of nature and/or ecosystem services)
☑ Climate change (one of five drivers of nature change)

**Stakeholder and customer demands**

☑ Consumer sentiment

**Regulators, legal and policy regimes**

☑ Global regulation

☑ Political impact of science (from galvanizing to paralyzing)

☑ Level of action (from local to global)

☑ Global targets

**Direct interaction with climate**

☑ On asset values, on the corporate

**Macro and microeconomy**

☑ Domestic growth

☑ Globalizing markets

## (5.1.1.10) Assumptions, uncertainties and constraints in scenario

*RCP 4.5 was used in conjunction with SSP2, the BNEF NEO, IEA SDS and IEA STEPS (previously IEA NPS) and 17 other references, which are available in the appendix of our 2023 Climate Change Report, by external specialists to construct IPL's bespoke 'Scenario B: 2oC Required Action Scenario.*

*This bespoke scenario describes a high degree of government 'penalty-led' regulation. Significant investment is deployed to transition to a decarbonised economy, including renewable energy and storage, energy efficiency and CCS. Global primary energy relies heavily on renewables, bioenergy and nuclear. Oil demand peaks by 2028. As industries decarbonise, major shifts in commodity demand are experienced. All industries face increasing pressure from government, investors and society to reduce GHG, with stakeholders pulling away from capital investments in high emissions industries which refuse to abate.*

*A global carbon price is implemented rapidly, reaching US32.7/ tonne by 2030, increasing to US71.8/ tonne by 2040 and US100/ tonne by 2050. The carbon price peaks in 2080 before dropping. Global food production increases from now until 2050. The agriculture, forestry and land use sector shifts from net positive to net negative GHG emissions. This drop is due to changing practices, including increasing forest cover. CCS is especially applicable in the chemicals industry, delivering 14 billion tonnes of abatement to 2060 in this scenario. Total global population peaks at 8.5 billion in 2050, before declining. By 2070, global population has dropped to 8.2 billion.*

*While this scenario assumes rapid global action is taken to reduce GHG, it describes greater physical impacts than the 1.5$^{o}$C. Risks for IPL include supply chain disruptions due to more extreme weather events. Carbon pricing and reduced demand for explosives in the coal sectors have potential to be financially material. Opportunities for IPL are associated with the transition: increased demand for low carbon products and services and the development of green hydrogen for energy use.*

## (5.1.1.11) Rationale for choice of scenario

*The RCP 4.5 scenario was used in in conjunction with SSP2, the BNEF NEO, IEA SDS and IEA STEPS (previously IEA NPS) scenario to create IPL's bespoke 2ºC Required Action scenario, which was then used to assess physical and transitional risks which may impact our own operations, our suppliers, logistics, and customer demand for our products and services across each business unit.*

*The rationale for using these sceanrios together is to arrive at a bespoke IPL Required Action scenario with which to assess impacts across areas including carbon pricing and carbon market development; the overall economy; the development of technology; people's consumption patterns and social structures; the physical environment and localised weather patterns; energy and power; agriculture and land use; mining and industry; infrastructure; and transport. It should be noted that water related impacts are also included in this assessment, however, it is not possible to select both water and climate change together in column 1 of this report.*

# Climate change

## (5.1.1.1) Scenario used

**Physical climate scenarios**

☑ Bespoke physical climate scenario

## (5.1.1.3) Approach to scenario

☑ Qualitative and quantitative

## (5.1.1.4) Scenario coverage

☑ Organization-wide

## (5.1.1.5) Risk types considered in scenario

☑ Policy
☑ Market
☑ Liability
☑ Reputation
☑ Technology
☑ Acute physical
☑ Chronic physical

## (5.1.1.6) Temperature alignment of scenario

☑ 1.5°C or lower

## (5.1.1.7) Reference year

*2020*

## (5.1.1.8) Timeframes covered

☑ 2025
☑ 2030
☑ 2040
☑ 2050

## (5.1.1.9) Driving forces in scenario

**Local ecosystem asset interactions, dependencies and impacts**

☑ Changes to the state of nature
☑ Changes in ecosystem services provision
☑ Speed of change (to state of nature and/or ecosystem services)
☑ Climate change (one of five drivers of nature change)

**Stakeholder and customer demands**

☑ Consumer sentiment
☑ Consumer attention to impact

**Regulators, legal and policy regimes**

☑ Global regulation
☑ Level of action (from local to global)
☑ Global targets

**Relevant technology and science**

☑ Other relevant technology and science driving forces, please specify: Development of green ammonia

**Direct interaction with climate**

☑ On asset values, on the corporate

**Macro and microeconomy**

☑ Domestic growth

☑ Globalizing markets

## (5.1.1.10) Assumptions, uncertainties and constraints in scenario

*The RCP 2.6 scenario was used in in conjunction with SSP1, the BNEF NEO, IEA SDS and IEA STEPS previously IEA NPS and 14 other references available in the appendix of our 2023 Climate Change Report, to create IPL's bespoke 'Scenario A: Fast Action1.5oC' scenario. Since the changes required to avoid more than 1.5 degrees of warming when the world is already 1 degree above preindustrial levels are extreme, this scenario describes rapid, far-reaching and unprecedented transitions occurring in energy, land, food, urban infrastructure, transport, buildings and industrial systems, including the widespread adoption of new and disruptive technologies and enhanced climate-driven innovation such as green hydrogen and CCS. There are also significant economic incentives described for companies to invest rapidly and at scale, assisting decarbonisation efforts in this scenario. A global carbon price is rapidly introduced reaching US300tCO2e by 2030 and US550t CO2e by 2040.*

*Deforestation is halted by 2030, food waste is reduced, and new low GHG cultivation methods are adopted. Global GHG decline by about 45 percent from 2010 levels by 2030 reaching Net Zero by 2050. Coalfired electricity generation is described as decreasing by nearly 80 percent by 2030 and is almost zero percent of electricity by 2050 with significantly increased use of bioenergy. This requires deployment of largescale bioenergy cropland.*

*GHG from industry are 65-90 percent lower in 2050 relative to 2010 through new technologies including electrification, renewable hydrogen, CCS and CCU. This scenario assumes no new coal or gas power stations are built from 2024. Hydrogen replaces gas for industry in Australia by 2040. By 2050 renewables supply 80% of electricity, gas with CCS makes up 8%, coal accounts for less than 1% by 2050.*

*Due to this fast action, physical impacts are not as severe as in the higher warming scenarios. The material financial risks identified are associated with the rapid transitioning of the economy and include policy and legal risks including carbon pricing and market risks such as reduced demand for explosives due to thermal coal decline and later metallurgical MET coal. Reputational risks may arise if IPL were not to report transparently on its efforts to manage the rapid transition.*

*Opportunities include increased demand for low carbon products and services as well as business opportunities associated with the development of green hydrogen for energy use.*

## (5.1.1.11) Rationale for choice of scenario

*The RCP 2.6 scenario was used in in conjunction with SSP1 the BNEF NEO IEA SDS and IEA STEPS previously IEA NPS and 14 other references available in the appendix of our 2023 Climate Change Report to create IPLs bespoke Scenario A: Fast Action1.5oC' scenario. This scenario which was then used to assess physical and transitional risks which may impact our own operations, our suppliers, logistics and customers (and therefore customer demand for our products and services) across each business unit.*

*The rational to use these scenarios and references together was to create a bespoke 1.5ºC scenario for IPL with which to assess impacts, risks and opportunities across areas including carbon pricing and carbon market development, the overall economy, the development of technology, people's consumption patterns and social structures, the physical environment and localised weather patterns, energy and power, agriculture and land use, mining and industry infrastructure and transport. Although not as severe as in higher warming scenarios, there will still be physical impacts associated with 1.5ºC of warming. The rational for using RCP2.6 was to identify these potential physical impacts. It should be noted that water related impacts are also included in this assessment, however, it is not possible to select both water and climate change together in column 1 of this report.*

# Climate change

## (5.1.1.1) Scenario used

**Climate transition scenarios**

☑ Bespoke climate transition scenario

## (5.1.1.3) Approach to scenario

☑ Qualitative and quantitative

## (5.1.1.4) Scenario coverage

☑ Organization-wide

## (5.1.1.5) Risk types considered in scenario

☑ Policy
☑ Market
☑ Liability
☑ Reputation
☑ Technology
☑ Acute physical
☑ Chronic physical

## (5.1.1.6) Temperature alignment of scenario

☑ 4.0°C and above

## (5.1.1.7) Reference year

*2020*

## (5.1.1.8) Timeframes covered

☑ 2025
☑ 2030
☑ 2040
☑ 2050

## (5.1.1.9) Driving forces in scenario

**Local ecosystem asset interactions, dependencies and impacts**

☑ Changes to the state of nature
☑ Changes in ecosystem services provision
☑ Speed of change (to state of nature and/or ecosystem services)
☑ Climate change (one of five drivers of nature change)

**Finance and insurance**

☑ Cost of capital
☑ Other finance and insurance driving forces, please specify: Cost of insurance

**Stakeholder and customer demands**

☑ Consumer sentiment
☑ Consumer attention to impact

**Regulators, legal and policy regimes**

☑ Global regulation

☑ Political impact of science (from galvanizing to paralyzing)

☑ Level of action (from local to global)

☑ Global targets

**Relevant technology and science**

☑ Other relevant technology and science driving forces, please specify**:** Development of green hydrogen and green ammonia

**Direct interaction with climate**

☑ On asset values, on the corporate

**Macro and microeconomy**

☑ Domestic growth

☑ Globalizing markets

## (5.1.1.10) Assumptions, uncertainties and constraints in scenario

*External specialists created IPL's bespoke Scenario D: Current Trajectory (3 Degrees) using RCP 8.5 as well as the following:*

- *IIASA,*
- *SSP Database (Version 2.0 December 2018), the IEA (2021);*
- *The Role of Critical Minerals in Clean Energy Transitions, May 2021;*
- *WEF (2021) How a 4 Degree temperature rise will affect people around the world. Climate Change, January 2021;*
- *UNPRI (2021) The Inevitable Policy Response: Forecast Policy Scenario Summary;*
- *the U.S. EIA (2021) EIA Annual Energy Outlook 2021;*
- *AEMO (2020) Integrated System Plan 2020; AEMO (2021) Gas Statement of Opportunities, March 2021; and*
- *the BloombergNEF (2020), Hydrogen Economy Outlook: Key Messages, among other references.*

*Our bespoke Scenario D: Current Trajectory (3 Degrees) describes a future resulting from current, business-as-usual policies which lead to significant global warming and increased exposure to physical risks. Carbon pricing is applied only in some geographies. In this scenario by 2030, there is a global 100% increase in the frequency of extreme heat events over land and by 2040 severe weather systems become significantly more intense. In some regions, water stress begins to impact cities and industrial processes and sectors which rely on water. GHG do not peak globally until around 2050. Physical impacts cause massive disruptions to global supply chains and economies. Extreme weather combined with sea level rise damages industry and infrastructure located near coastlines. Current trends in renewable electricity generation uptake continue, however fossil fuels remain the dominant source of primary energy. Global coal and US natural gas consumption grows, increasing by 25% from 2025 to 2050. In Australia, trade in LNG continues to grow and there are shortfalls in supply. Transition risks are not as prevalent due to lack of policies, but substantial physical impacts over the medium to long term are socially and economically devastating, resulting in business disruption, damage to property and infrastructure, and significant impacts to global supply chains. Increased temperatures, sea level rise and precipitation changes affect labour, capital and agricultural productivity, and cause operational and raw material disruptions to key industries. Geopolitical conflict results.*

## (5.1.1.11) Rationale for choice of scenario

*Our bespoke Scenario D: Current Trajectory (3 Degrees) using RCP 8.5 as well as the following to inform us on likely transitional impacts, risks and opportunities: IIASA, SSP Database (Version 2.0 December 2018), the IEA (2021); The Role of Critical Minerals in Clean Energy Transitions, May 2021; WEF (2021) How a 4 Degree temperature rise will affect people around the world. Climate Change, January 2021; UNPRI (2021) The Inevitable Policy Response: Forecast Policy Scenario Summary; the U.S. EIA (2021) EIA Annual Energy Outlook 2021; AEMO (2020) Integrated System Plan 2020; AEMO (2021) Gas Statement of Opportunities, March 2021; and the BloombergNEF (2020), Hydrogen Economy Outlook: Key Messages.*

*The rational for using these was to consider transition impacts, risks and opportunities that may arise should this higher warming pathway be realised, as there will still be transition risks associated with this scenario. For example, this is a BAU scenario and there are regional carbon pricing schemes currently, and risks associated with these being walked back, or continuing in an uncoordinated way. Reputational risks were also considered, as were changes in the overall economy; the development of technology; people's consumption patterns and social structures; the physical environment and localised weather patterns; energy & power; agriculture and land use; mining and industry; infrastructure; and transport.*

### Climate change

## (5.1.1.1) Scenario used

**Climate transition scenarios**

☑ Bespoke climate transition scenario

## (5.1.1.3) Approach to scenario

☑ Qualitative and quantitative

## (5.1.1.4) Scenario coverage

☑ Organization-wide

## (5.1.1.5) Risk types considered in scenario

☑ Policy
☑ Market
☑ Liability
☑ Reputation
☑ Technology
☑ Acute physical
☑ Chronic physical

## (5.1.1.6) Temperature alignment of scenario

☑ 3.0°C - 3.4°C

## (5.1.1.7) Reference year

*2020*

## (5.1.1.8) Timeframes covered

☑ 2025
☑ 2030
☑ 2040
☑ 2050

## (5.1.1.9) Driving forces in scenario

**Local ecosystem asset interactions, dependencies and impacts**

☑ Changes to the state of nature
☑ Changes in ecosystem services provision
☑ Speed of change (to state of nature and/or ecosystem services)
☑ Climate change (one of five drivers of nature change)

**Finance and insurance**

☑ Cost of capital
☑ Other finance and insurance driving forces, please specify :Cost of insurance

**Stakeholder and customer demands**

☑ Consumer sentiment
☑ Consumer attention to impact
☑ Impact of nature service delivery on consumer

**Regulators, legal and policy regimes**

☑ Global regulation

☑ Political impact of science (from galvanizing to paralyzing)

☑ Level of action (from local to global)

☑ Global targets

**Relevant technology and science**

☑ Other relevant technology and science driving forces, please specify**:** Development of green hydrogen and green ammonia

**Direct interaction with climate**

☑ On asset values, on the corporate

**Macro and microeconomy**

☑ Domestic growth

☑ Globalizing markets

## (5.1.1.10) Assumptions, uncertainties and constraints in scenario

*External specialists constructed IPL's bespoke 'Scenario C: Delayed Action followed by Rapid Action (Inevitable Policy Response – IPR) in conjunction with the following:*

- *The IEA SDS scenario;*
- *Poulter, J. (2021) The Inevitable Policy Response 2021: Forecasting and Aligning, Principles for Responsible Investment, Investor Brief, March 2021;*
- *Vivid Economics and Energy Transition Advisors, Inevitable Policy Response 2021 Policy Forecast Executive Summary (2021);*
- *Vivid Economics and Energy Transition Advisors (2019) The Inevitable Policy Response: Forecast Policy Scenario 2021 (IPR FPS 2021), December 2021;*
- *Principles for Responsible Investment, Forecast Policy Scenario: Macroeconomic Results (2019) and*
- *Simeone, C. (2018) The Inevitable Policy Response Theory, Kleinman Centre for Energy Policy and*
- *RCP 6.0.*

*Our 'Delayed Action scenario describes a future where delayed action results in severe physical impacts, followed by rapid action between 2025 and 2030, causing late, rapid, disorderly and unprecedented changes to the global economy. Transitional risks for IPL include localised carbon pricing schemes causing competition risks, market risks associated with a less orderly transition and, potentially, stranded assets and loss of revenue if this transition were not managed in advance. Physical risks include increased hurricanes, storms and floods, periods of drought and water shortages, which could impact on IPL's operations, supply chains and customers, and an increased risk of inundation at some coastal sites. In this scenario, coal maintains 20% of primary energy, with oil and gas holding 25% each to 2030, then a rapid shift to align with a 1.5ºC scenario. Coal-fired generation decreases to 4% with CCS on any remaining. Oil falls to 7% and renewables make up almost 50%. The US, Canada and Australia are described as implementing comprehensive policies by 2030 to reduce GHGs from agriculture and phase out coal by*

*2030. Bioenergy crops play a significant role in the transport sector. Some countries ban new unabated (no CCS) fossil-based industrial plants by 2040. By 2050, hydrogen contributes at least 20% of energy and feedstock demand in hard-to-abate sectors, such as iron and steel, non-metallic minerals and chemicals.*

## (5.1.1.11) Rationale for choice of scenario

*IPL's integrated risk assessment process makes use of IPL-specific future climate-related scenarios which are updated every three years, as mandated by the charter of the Audit and Risk Management Committee of the Board. An expert third party is engaged to update the scenarios using the most recently available climate-related information including Assessment Reports and Representative Concentration Pathways (RCPs) from the Intergovernmental Panel on Climate Change, New Energy Outlooks from BloombergNEF and Shared Socioeconomic Pathways (SSP), along with a range of scientific and consultancy papers relevant to our businesses and geographical locations. IPL's bespoke 'Inevitable Policy Response' scenario used in conjunction with the references outlined under 'Assumption, uncertainties and constraints' above. This was then used to assess physical and transitional risks which may impact our own operations, our suppliers, logistics, and customer demand for our products and services across each business unit.*

*The rationale for using these scenarios together is to arrive at a bespoke IPL Inevitable Policy Response scenario with which to assess not only physical impacts across our operations, supply chains and customer markets, but also transitional risks including carbon pricing and carbon market development; the overall economy; the development of technology; people's consumption patterns and social structures; energy and power; agriculture and land use; mining and industry; infrastructure; and transport. It should be noted that water related impacts are also included in this assessment, however, it is not possible to select both water and climate change together in column 1 of this report.*

# Climate change

## (5.1.1.1) Scenario used

**Climate transition scenarios**

☑ Bespoke climate transition scenario

## (5.1.1.3) Approach to scenario

☑ Qualitative and quantitative

## (5.1.1.4) Scenario coverage

☑ Organization-wide

## (5.1.1.5) Risk types considered in scenario

☑ Policy
☑ Market
☑ Liability
☑ Reputation
☑ Technology
☑ Acute physical
☑ Chronic physical

## (5.1.1.6) Temperature alignment of scenario

☑ 2.0°C - 2.4°C

## (5.1.1.7) Reference year

*2018*

## (5.1.1.8) Timeframes covered

☑ 2025
☑ 2030
☑ 2040
☑ 2050

## (5.1.1.9) Driving forces in scenario

**Local ecosystem asset interactions, dependencies and impacts**

☑ Changes to the state of nature
☑ Changes in ecosystem services provision
☑ Speed of change (to state of nature and/or ecosystem services)
☑ Climate change (one of five drivers of nature change)

**Finance and insurance**

☑ Cost of capital

☑ Other finance and insurance driving forces, please specify: Cost of insurance

**Stakeholder and customer demands**
☑ Consumer sentiment
☑ Consumer attention to impact
☑ Impact of nature service delivery on consumer

**Regulators, legal and policy regimes**
☑ Global regulation
☑ Political impact of science (from galvanizing to paralyzing)
☑ Level of action (from local to global)
☑ Global targets
☑ Other regulators, legal and policy regimes driving forces, please specify**:** Carbon pricing

**Relevant technology and science**
☑ Other relevant technology and science driving forces, please specify**:** Development of green hydrogen and green ammonia

**Direct interaction with climate**
☑ On asset values, on the corporate

**Macro and microeconomy**
☑ Domestic growth
☑ Globalizing markets

## (5.1.1.10) Assumptions, uncertainties and constraints in scenario

*RCP 4.5 was used in conjunction with SSP2, the BNEF NEO, IEA SDS and IEA STEPS (previously IEA NPS) and 17 other references, which are available in the appendix of our 2023 Climate Change Report, by external specialists to construct IPL's bespoke 'Scenario B: 2oC Required Action Scenario.*

*This bespoke scenario describes a high degree of government 'penalty-led' regulation. Significant investment is deployed to transition to a decarbonised economy, including renewable energy and storage, energy efficiency and CCS. Global primary energy relies heavily on renewables, bioenergy and nuclear. Oil demand peaks by 2028. As industries decarbonise, major shifts in commodity demand are experienced. All industries face increasing pressure from government, investors and society to reduce GHG, with stakeholders pulling away from capital investments in high emissions industries which refuse to abate. A global carbon price is* *implemented rapidly, reaching US$32.7/ tonne by 2030, increasing to US$71.8/ tonne by 2040 and US$100/ tonne by 2050. The carbon price peaks in 2080 before dropping. Global food production increases from now until 2050.*

*The agriculture, forestry and land use sector shifts from net positive to net negative GHG emissions. This drop is due to changing practices, including increasing forest cover. CCS is especially applicable in the chemicals industry, delivering 14 billion tonnes of abatement to 2060 in this scenario. Total global population peaks at 8.5 billion in 2050, before declining. By 2070, global population has dropped to 8.2 billion. While this scenario assumes rapid global action is taken to reduce GHG, it describes greater physical impacts than the 1.5ºC.*

*Risks for IPL include supply chain disruptions due to more extreme weather events. Carbon pricing and reduced demand for explosives in the coal sectors have potential to be financially material. Opportunities for IPL are associated with the transition: increased demand for low carbon products and services and the development of green hydrogen for energy use.*

## (5.1.1.11) Rationale for choice of scenario

*SSP2, the BNEF NEO, IEA SDS and IEA STEPS (previously IEA NPS) scenarios were used in conjunction with RCP 4.5 scenario to create IPL's bespoke 2oC Required Action scenario, which was then used to assess physical and transitional risks which may impact our own operations, our suppliers, logistics, and customer demand for our products and services across each business unit.*

*The rationale for using these scenarios together is to arrive at a bespoke IPL Required Action scenario with which to assess impacts across areas including carbon pricing and carbon market development; the overall economy; the development of technology; people's consumption patterns and social structures; the physical environment and localised weather patterns; energy and power; agriculture and land use; mining and industry; infrastructure; and transport should a 2 degree scenario eventuate. It should be noted that water related impacts are also included in this assessment, however, it is not possible to select both water and climate change together in column 1 of this report.*

# Climate change

## (5.1.1.1) Scenario used

**Climate transition scenarios**

☑ Bespoke climate transition scenario

## (5.1.1.3) Approach to scenario

☑ Qualitative and quantitative

## (5.1.1.4) Scenario coverage

☑ Organization-wide

## (5.1.1.5) Risk types considered in scenario

☑ Policy
☑ Market
☑ Liability
☑ Reputation
☑ Technology
☑ Acute physical
☑ Chronic physical

## (5.1.1.6) Temperature alignment of scenario

☑ 1.5°C or lower

## (5.1.1.7) Reference year

*2020*

## (5.1.1.8) Timeframes covered

☑ 2025
☑ 2030
☑ 2040
☑ 2050

## (5.1.1.9) Driving forces in scenario

**Local ecosystem asset interactions, dependencies and impacts**

☑ Changes to the state of nature
☑ Changes in ecosystem services provision
☑ Speed of change (to state of nature and/or ecosystem services)

☑ Climate change (one of five drivers of nature change)

**Finance and insurance**

☑ Cost of capital

☑ Other finance and insurance driving forces, please specify :Cost of insurance

**Stakeholder and customer demands**

☑ Consumer sentiment

☑ Consumer attention to impact

☑ Impact of nature service delivery on consumer

**Regulators, legal and policy regimes**

☑ Global regulation

☑ Political impact of science (from galvanizing to paralyzing)

☑ Level of action (from local to global)

☑ Global targets

☑ Other regulators, legal and policy regimes driving forces, please specify :Carbon Pricing

**Relevant technology and science**

☑ Other relevant technology and science driving forces, please specify :Development of green hydrogen and green ammonia

**Direct interaction with climate**

☑ On asset values, on the corporate

**Macro and microeconomy**

☑ Domestic growth

☑ Globalizing markets

## (5.1.1.10) Assumptions, uncertainties and constraints in scenario

*External specialists used SSP1, the BNEF NEO, IEA SDS and IEA STEPS (previously IEA NPS) in conjunction with RCP 2.6 and 14 other references available in the appendix of our 2023 Climate Change Report, to create IPL's bespoke 'Scenario A: Fast Action1.5ºC' scenario. Since the changes required to avoid more than 1.5 degrees of warming when the world is already 1 degree above preindustrial levels are extreme, this scenario describes rapid, far-reaching and unprecedented* *transitions occurring in energy, land, food, urban infrastructure, transport, buildings and industrial systems, including the widespread adoption of new and disruptive technologies and enhanced climate-driven innovation such as green hydrogen and CCS. There are also significant economic incentives described for companies to invest rapidly and at scale, assisting decarbonisation efforts in this scenario. A global carbon price is rapidly introduced reaching US$300tCO2e by 2030 and US$550t CO2e by 2040. Deforestation is halted by 2030, food waste is reduced, and new low GHG cultivation methods are adopted. Global GHG decline by about 45 percent from 2010 levels by 2030 reaching Net Zero by 2050.*

*Coalfired electricity generation is described as decreasing by nearly 80 percent by 2030 and is almost zero percent of electricity by 2050 with significantly increased use of bioenergy. This requires deployment of largescale bioenergy cropland. GHG from industry are 65-90 percent lower in 2050 relative to 2010 through new technologies including electrification, renewable hydrogen, CCS and CCU. This scenario assumes no new coal or gas power stations are built from 2024. Hydrogen replaces gas for industry in Australia by 2040. By 2050 renewables supply 80% of electricity, gas with CCS makes up 8%, coal accounts for less than 1% by 2050.*

*Due to this fast action, physical impacts are not as severe. The material financial risks identified are associated with the rapid transitioning of the economy and include policy and legal risks including carbon pricing and market risks such as reduced demand for explosives due to thermal coal decline and later metallurgical MET coal. Reputational risks may arise if IPL were not to report transparently on its efforts to manage the rapid transition. Opportunities include increased demand for low carbon products and services as well as business opportunities associated with the development of green hydrogen for energy use.*

## (5.1.1.11) Rationale for choice of scenario

*The rationale for using SSP1, the BNEF NEO, IEA SDS and IEA STEPS (previously IEA NPS) in conjunction with RCP 2.6 and 14 other references available in the appendix of our 2023 Climate Change Report, to create IPL's bespoke 'Scenario A: Fast Action1.5oC' scenario was to create a bespoke 1.5oC scenario for IPL with which to assess impacts, risks and opportunities across areas including carbon pricing and carbon market development, the overall economy, the development of technology, people's consumption patterns and social structures, the physical environment and localised weather patterns, energy and power, agriculture and land use, mining and industry infrastructure and transport, including the actions that would be required to limit global warming to a Paris aligned 1.5oC.*

## (5.1.2) Provide details of the outcomes of your organization’s scenario analysis.

## Climate change

## (5.1.2.1) Business processes influenced by your analysis of the reported scenarios

*Select all that apply*

☑ Risk and opportunities identification, assessment and management

☑ Strategy and financial planning

☑ Resilience of business model and strategy

☑ Capacity building

☑ Target setting and transition planning

## (5.1.2.2) Coverage of analysis

☑ Organization-wide

## (5.1.2.3) Summarize the outcomes of the scenario analysis and any implications for other environmental issues

*Using scenario analysis to identify the risks and opportunities that IPL may face as a result of climate change has allowed us to assess the resilience of our two businesses, Dyno Nobel and IPF, and their strategies, and to build our risk management capacity.*

*We refresh our scenarios and risk assessment every three years, using the four scenarios described at 5.1.1 which are a 1.5oC Fast Action Scenario, 2oC Required Action Scenario, Delayed Action (Inevitable Policy Response) Scenario and Current Trajectory 3oC scenario in 2021 with our next scenario refresh in 2024. Our scenarios are developed using the focal questions:*
*• Which IPL operations are most exposed to physical risk and why?*
*• What will each scenario mean for policy and legal risks, such as carbon pricing?*
*• What will each scenario mean for demand for our products and services across each business unit?*
*• Which customers are most exposed under each scenario and why?*
*• How may our suppliers and associated logistics be impacted under each scenario? Which items are at most risk under each scenario?*
*• Where do opportunities exist under each scenario? What actions should be put in place now to maximise future opportunities?*
*• What are the signposts that indicate a risk or opportunity is becoming more likely?*

*For the Delayed Action (IPR)scenario the following additional focal questions were used:*
*• Are there any business relationships or long-term contracts which may be exposed under a late but rapid transition?*
*• Are there IPL operations which require a long-lead time to transition and therefore may have a higher exposure to a late but rapid transition?*

*A summary of the major physical risks includes supply chain impacts at Phosphate Hill due to flooding in all scenarios in the short term; hurricanes impacting WALA (now sold and in our upstream supply chain) directly, or with extended power outages in the short term; and baseline water stress increasing at GI in the medium to long term.*

*Policy risks in the 1.5oC, 2oC & IPR scenarios include carbon pricing impacting IPL if it is not applied uniformly across global markets and cannot be passed on. Major market changes in the 1.5oC and & 2oC scenarios include a decline in demand for thermal coal in the short term, then also metallurgical (MET) coal in the medium to long term. This would reduce demand for bulk explosives across thermal coal markets we serve in the US in the short term and MET coal markets (Moranbah) in the medium to long term. However, both the 1.5oC and & 2oC scenarios see an increase in the mining of new world metals and copper globally for low-carbon technologies, and the 2oC, 3oC and IPR scenarios see an increased demand for quarry & construction explosives for rebuilding following impacts.*

*The IPR & 3 scenarios describe climate impacts reducing farming yields which may result in increased demand for specialist fertilisers. The 1.5C &2C scenarios describe opportunities for growth in GHG fertilisers (EEFs), partnerships for soil carbon sequestration and low GHG explosives in the short term, and the development of green ammonia (NH3) & renewable H2 in the medium term. IPL is an expert in the manufacture & handling of both H2 & NH3 and is well placed to maximise opportunities.*

*The 1.5C &2C scenarios describe increased pressure from capital markets & investors to improve climate disclosure, worsening lending conditions, and risk of divestment in the short term. Certain long-term contracts & rising insurance costs present risks.*

*IPL's ammonia manufacturing plants run continuously. GHG reductions require major capital investments with project implementation during 3-year cycle maintenance shut-downs. IPL has responded by developing mitigation plans for rail outages due to flooding at Phos Hill and installing boilers for restarting WALA in the event that power outages occur. The shift away from thermal coal is being managed in the US through diversion to western and Canadian metals markets, and with the purchase of Titan Nobel in 2022, Dyno Nobel entered the French quarry and construction market and gained access to New Caledonian and West African markets with future facing mineral opportunities.*

*Climate change considerations have been built into our 'Customer Focus' and 'Leading Technology Solutions' core strategic drivers and we continue to develop Enhanced Efficiency Fertilisers (EEFs) to reduce GHG emissions from farming as well as DeltaE explosives technologies and an electric explosives delivery vehicle for mining customers, which both reduce their GHG. The development and adoption of low carbon manufacturing technologies has been built into our 'Manufacturing Excellence' strategy, with two N2O abatement projects approved for installation in 2024 and 2025 and several green ammonia projects under investigation. These technologies have been identified as both a risk management strategy for carbon pricing impacts and an opportunity for revenue increase associated with premium 'low carbon' products.*

### Water

## (5.1.2.1) Business processes influenced by your analysis of the reported scenarios

☑ Risk and opportunities identification, assessment and management

☑ Resilience of business model and strategy

## (5.1.2.2) Coverage of analysis

☑ Organization-wide

## (5.1.2.3) Summarize the outcomes of the scenario analysis and any implications for other environmental issues

*The outcomes of our scenario analyses include the identification of sites at which water quantity and quality is currently a material issue and where risks will increase by 2030 and 2040. Ammonia production requires large quantities of high-quality water for cooling purposes. Therefore, our primary exposure to water risks is operational.*

*The second most important risk is water availability for agricultural customers, as this impacts on sales/revenues from fertiliser sales. Water availability and quality at a basin/catchment level, and stakeholder conflicts regarding water were also considered, both currently and into the future, to assess short, medium and long-term water risks associated with our manufacturing operations. Our sites at Cheyenne, Wyoming and Gibson Island were identified as being exposed to these risks due to* *their significant water use (Gibson Island, in the case of green ammonia production proceeding at that site in the future.) Our Geelong SSP manufacturing site is also in a region of high baseline water stress, although it does not use the quantities of water that our ammonia sites use.*

*Other sites exposed to potential future water supply risks include our Mt Isa sulphuric acid plant. Our Phosphate Hill site is at risk of flooding disrupting the single rail line that connects the site to acid supply from Mt Isa and product transfer to ports at Townsville.*

## (5.2) Does your organization's strategy include a climate transition plan?

### (5.2.1) Transition plan

☑ Yes, we have a climate transition plan which aligns with a 1.5°C world

### (5.2.3) Publicly available climate transition plan

☑ Yes

### (5.2.4) Plan explicitly commits to cease all spending on, and revenue generation from, activities that contribute to fossil fuel expansion

☑ No, and we do not plan to add an explicit commitment within the next two years

### (5.2.6) Explain why your organization does not explicitly commit to cease all spending on and revenue generation from activities that contribute to fossil fuel expansion

*IPL manufactures and supplies ammonium nitrate based explosives to the mining sector and ammonium phosphate and single superphosphate fertilisers to the agricultural industry. The chemical process to make the ammonia molecule at the base of these products is a hard-to-abate process, as it currently requires natural gas as both a feedstock for hydrogen and an energy source. For this reason, access to natural gas supplies will remain essential to continue to provide these products and services to customers, and maintain the employment opportunities associated with their manufacture, until renewable hydrogen as a feedstock becomes financially competitive with natural gas. This is required for an orderly and just economic transition and to prevent carbon leakage offshore from the US and Australian manufacturing facilities closing before they can decarbonise.*

*IPL is working on several projects and partnerships to bring forward the development of green ammonia. However, depending on their location, their success depends on the speed at which the grid is decarbonised - the key requirement for renewable hydrogen (which is made from the electrolysis of water rather than the reforming of natural gas) to become competitive with natural gas is large quantities of renewable electricity at ~A$20 per MWh.*

## (5.2.7) Mechanism by which feedback is collected from shareholders on your climate transition plan

☑ Our climate transition plan is voted on at AGMs and we also have an additional feedback mechanism in place

## (5.2.8) Description of feedback mechanism

*In addition to our 3 year 'Say on Climate' vote at IPL's AGM, we meet regularly with investors and investor groups to received feedback on the progress of our Climate Transition Plan.*

## (5.2.9) Frequency of feedback collection

☑ More frequently than annually

## (5.2.10) Description of key assumptions and dependencies on which the transition plan relies

*IPL will achieve 7% and 19% absolute reductions against our 2020 baseline through the implementation of two N2O tertiary abatement installations in 2024 and 2025 at Moranbah, Queensland and Louisiana, Missouri respectively. In order to reach Net Zero by 2050, our transition plan relies on the following key assumptions:*

*1. Green hydrogen manufacture for green ammonia production will become competitive with natural gas by 2040 through*

*(a) reductions in electrolyser capital costs due to increased R&D spend and value manufacturing at scale and*

*(b) large amounts of low-cost solar, wind, hydro and/or nuclear electricity will be supplied from the grid, or from behind-the-meter renewable energy installations where grid connectivity is limited. This will also enable electrification of our vehicle fleet and replacement of our two on-site gas-fired power plants.*

*2. Offsets will be available for 8% of residual GHG which cannot be avoided.*

## (5.2.11) Description of progress against transition plan disclosed in current or previous reporting period

*We continued to progress 4 key projects in 2023:*

*1. The Dyno Nobel Moranbah nitric acid plant was built in Queensland in 2012 as part of the Moranbah ammonium nitrate manufacturing facility. The plant was built with secondary abatement installed, which reduces potential N2 O emissions by 50-60%, and has abated an estimated 400,000 tCO2 e each year for the past nine years. Since these reductions were being achieved well before our 2020 baseline was set, further reductions require technology less commonly applied to nitric acid plants. After investigation in 2021, IPL approved the installation of tertiary N2 O abatement at Moranbah. Up to 99% of N2 O process emissions, which are created during nitric acid manufacture, are removed from the tail gas stream through catalytic conversion to naturally occurring nitrogen and oxygen. Once installed, a further 200,000 tCO2 e will be abated annually at Moranbah. This will equate to a 7% reduction against IPL's 2020 baseline and an 11% reduction for our Dyno Nobel business against its 2020 baseline. During 2023, A$6.3m was invested to progress the project, with installation completed in March 2024 (which is after the end of* *this reporting period). The unit is performing well and is likely to result in IPL exceeding our short-term absolute reduction target of 5% by 2025 against our 2020 baseline.*

*2. Dyno Nobel's Louisiana, Missouri (LOMO) AN manufacturing facility has the Company's only nitric acid plant without some form of abatement already installed. For this reason, abatement of N2O at LOMO has been under investigation for some time. This project passed through Front End Loading (FEL) stage in 2023 with A2.8m invested and was approved by the Board in August 2023 with installation targeted for 2025. Once installed, 500,000 tCO2e will be abated annually at LOMO. This will equate to an 18.5% reduction against IPL's 2020 baseline and a 30% reduction for the Dyno Nobel business against its 2020 baseline.*

*3. During 2023, the FEED study was completed for the proposed Carbon Capture Facility (CCF) at the Dyno Nobel Waggaman, Louisiana (WALA) ammonia manufacturing facility. The CCF is designed to capture the pure stream of CO2 created during the ammonia manufacturing process, which only requires drying and compression before transport via pipeline to a permanent geological sequestration site. IPL reached an agreement for the sale of WALA to CF Industries in March 2023. A 25-year ammonia supply agreement was secured with CF for up to 200,000 short tons of ammonia a year, meaning dyno Nobel's upstream Scope 3 will be reduced by this project.*

*4. The GI Green ammonia project progressed through front end engineering design (FEED) stage during 2022&2023 supported by an A13.7m ARENA grant, and a final investment decision is expected imminently from our partner FFI. 5. Scope 3 strategies progressed with a management strategy for each source identified and published in our 2023 Climate Change Report.*

## (5.2.12) Attach any relevant documents which detail your climate transition plan (optional)

*IPL_CCR23_web_Spread_FINAL.pdf*

## (5.2.13) Other environmental issues that your climate transition plan considers

☑ Water

## (5.2.14) Explain how the other environmental issues are considered in your climate transition plan

*IPL's climate-related scenario analyses include the impact of climate change on ecosystem services related to water. For example, the northern half of Australia is described as becoming hotter and wetter with more infrequent and intense rainfall events, and the southern half is described as becoming hotter and dryer in all scenarios.*

*The physical risks identified include an increasing incidence of logistics and supply chain interruptions from flooding for our Phosphate Hill site, increasing water stress in Geelong and Brisbane where our Geelong and Gibson Island sites are located, and an increased risk of storm water pond overflows at sites in northern Australia, including Moranbah and Gibson Island, due to more intense rainfall events. In the medium to long term, there may be an increased risk of storms and storm inundation at GI and Portland, where operations are located close to sea level, due to creeping sea level rise.*

## (5.3) Have environmental risks and opportunities affected your strategy and/or financial planning?

### (5.3.1) Environmental risks and/or opportunities have affected your strategy and/or financial planning

☑ Yes, both strategy and financial planning

### (5.3.2) Business areas where environmental risks and/or opportunities have affected your strategy

☑ Products and services
☑ Upstream/downstream value chain
☑ Investment in R&D
☑ Operations

## (5.3.1) Describe where and how environmental risks and opportunities have affected your strategy.

### Products and services

### (5.3.1.1) Effect type

☑ Risks
☑ Opportunities

### (5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

☑ Climate change

### (5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

*The environmental issues identified in our climate related scenario assessments and our TNFD assessment have been built into our product and services strategy through our 'Leading Technology Solutions' strategic driver. Our strategy is to deliver leading technology solutions that improve safety, reduce environmental impacts and increase productivity and efficiency in our customers' operations. Our technology collaboration pipeline is structured using Seven Stages, ranging from Idea Capture (Stage 1) to Commercialisation (Stage 7). New products are assessed by our Executive Technology Steering Committee who evaluate the innovations* *against the three core pillars of our technology strategy, which are 'Productivity. Safety. Sustainability.' Examples of two explosives products include Delta E and our new EV MPU (on mine site explosives delivery truck:*

- *Differential Energy (DeltaE) is a proprietary explosives method which allows blasters to accurately vary the density, and therefore the energy, of the emulsion explosive as it is being loaded into the blast hole. This enables the operator to load variable energy segments to match the unique geological characteristics present in the ground. This facilitates the most efficient use of energy to blast the rock, reducing the overuse of explosives that occurs with a set density. The use of DeltaE continues to result in reduced NOx emissions, reduced energy use and GHG, and less dust, noise and ground vibration.*

- *Mobile Processing Units (MPUs) are heavy vehicles used in mining operations to manufacture or blend bulk explosives at customer blast holes. In 2023 we built the very first electric MPU, complete with its own solar charging station. Designed last year, the prototype electric (eMPU) chassis was assembled this year and is designed to carry DeltaE. It has a 350kWh battery onboard and is recharged using a 650kWh battery charging station which can draw power from solar and wind generation at the customer mine site. Power is optimised by regenerative braking, which uses the onboard motor as a generator as the fully loaded truck descends to the mine and uses the brakes. After road testing, the eMPU will have the chemical processing unit fitted on the back and the unit will be ready for delivery and use.*

*Likewise, products and services which reduce the environmental impacts associated with the use of our fertiliser products are now a core part of our IPF Business strategy. IPF has developed a range of treated Enhanced Efficiency Fertilisers (EEFs) which keep nitrogen (N) in a stable form for longer, maximising N uptake by crops and reducing losses to the air as GHG and to waterways through leaching. We also promote soils testing to support precision application of nutrients, so that only what is needed to maximise each crop is applied.*

## Upstream/downstream value chain

### (5.3.1.1) Effect type

☑ Risks

### (5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

☑ Climate change

### (5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

*The risk of flood interruptions to rail at Phosphate Hill have been addressed through several actions:*

- *Additional onsite storage built at a cost of A$36m to ensure that production could continue if the transport of product offsite was slowed due to a switch from rail to road transloading.*
- *Each wet season, a dry truck unloading chute conveyor and telehandler are also hired at a cost of A$220,000.*
- *Strategies around inventory management have been updated, with stocks cleared ahead of the wet season.*

- *In addition, expected weather conditions are monitored and trigger metrics have been set in advance, with a decision making process clearly outlined, including key decision makers, roles and responsibilities.*

*Our Dyno Nobel explosives business is managing the transition away from thermal coal mining markets through a strategic shift towards supplying to metals markets and Q&C. Our major exposure to thermal coal is supplying the Powder River Basin (PRB), North America's most competitive thermal coal mining region, with ammonium nitrate AN explosives manufactured at our Cheyenne Wyoming plant. This site is also well positioned to service the Base & Precious Metals mining sector in Canada and Western US. In addition, the Cheyenne site captures carbon dioxide created from the production of ammonia to use in the manufacture of urea and invested A$30m in capex to produce a urea-based Diesel Exhaust Fluid DEF product which is used to mitigate NOx emissions in diesel vehicles, providing an alternative income stream for this facility.*

*In a strategic purchase, Dyno Nobel acquired Titanobel in 2022, allowing it to enter the French quarry and construction market and gain access to New Caledonian and West African markets with future facing mineral opportunities. When combined with the existing Nitromak business in Turkey, this provides a compelling foundation to grow the business across Europe, the Middle East and Africa.*

## Investment in R&D

### (5.3.1.1) Effect type

☑ Risks

☑ Opportunities

### (5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

☑ Climate change

☑ Water

### (5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

*IPL invests in R&D for products which solve customer issues related to their sustainability and productivity, including GHG emissions and the loss of applied plant nutrients in our fertilisers to waterways from customer farms. As a result of both our climate change scenario assessments and our TNFD assessment, IPF continues to test our Enhanced Efficiency Fertilisers range to work towards a data set that can be used to quantify the GHG reductions associated with their use. This is a core part of our strategy to increase the sales of and use of these products. IPF has tested the use of fertilisers treated with the nitrification inhibitor, dimethyl pyrazole glycolate (DMP-G), which has been shown to reduce nitrous oxide (N2O) emissions. This research is important for the decarbonisation of the agricultural sector, because nitrous oxide is a GHG with a warming potential 265 times higher than $CO_2$.*

*Using eNpower EasyN, a combination of our proprietary nitrification inhibitor containing (DMP-G), and urea ammonium nitrate solution, we recorded a 64% reduction in $N_2O$ emissions over the 36-day experiment. With more nitrogen being retained in the soil, farmers may be able to maintain current yields with less applied nitrogen,* *and/or grow increased yields with existing nitrogen application rates. Improved nitrogen use efficiency is a key objective for IPF's research, as it reduces GHG and improves productivity.*

*In 2023, field trials continued to show substantial reductions in GHG with the use of inhibitors. In partnership with Latrobe University, we tested a blend of organo-mineral fertilisers applied to celery crops. The use of organo-mineral products and dimethylpyrazole phosphate (DMPP) treated synthetic fertiliser reduced $N_2O$ emissions by between 55% and 82% compared with the standard practice of applying chicken manure and inorganic fertiliser during the cropping cycle.*

*A separate trial aimed to quantify the effect of our Trigger humic acid granule when applied with NPKS fertiliser at a cabbage field in Bacchus Marsh. GHG emissions were sampled at pre-determined intervals using static chambers and analysed, with the initial results showing promising reductions in GHG with the use of Trigger. See our 2023 Climate Change Report for some of the data from this trial. Measurements will continue over the next few months with further data on biomass, tissue and soil analysis to be collected.*

## Operations

### (5.3.1.1) Effect type

☑ Risks

☑ Opportunities

### (5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

☑ Climate change

### (5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

*The identification of environmental risks associated with GHG emissions from our operations, as well as opportunities for competitive advantage associated with reducing our GHG per tonne of product produced, have resulted in the integration of decarbonisation activities into our company strategy through our Climate Transition Plan. Examples include the First Order Capital Allocation of 'Sustainability Capital' to deliver GHG emissions reductions, with A100-120m in aggregate to 2030, A50m spent on decarbonisation projects in FY23 and spend of A20-30m expected in FY24.*

*In addition, we recognise that there will be increasing customer demand for high quality Scope 3 GHG data related to the manufacture of our products. As a result, we have invested in a new data platform to make the calculation of these cradle-to-customer-gate scope 3 GHG calculations easier and more timely, so that we can provide this data more frequently to customers as a differentiating value add.*

### (5.3.2) Describe where and how environmental risks and opportunities have affected your financial planning.

#### Row 1

## (5.3.2.1) Financial planning elements that have been affected

☑ Capital Expenditures

☑ Capital Allocation

## (5.3.2.2) Effect type

☑ Risks

☑ Opportunities

## (5.3.2.3) Environmental issues relevant to the risks and/or opportunities that have affected these financial planning elements

☑ Climate change

## (5.3.2.4) Describe how environmental risks and/or opportunities have affected these financial planning elements

*1. In 2022, the IPL CFO and DET Steering Committee established 'Sustainability Capital' within the Capital Allocation Frameworks for its explosives and fertilisers businesses, in order to progress a range of major projects required to decarbonise our operations. As a result, our Capital Allocation Framework now prioritises 'Sustainability Capital' as part of the order 1, or 'first taker' of capital, with A$100-120m planned in aggregate to 2030, A$50m spent on decarbonisation projects in FY23 and A$20-30m expected in FY24.*

*2. Internal carbon pricing has been included in capital expenditure assessments for projects at our major manufacturing sites in Australia since Australian Carbon Credit Units (ACCUs) were introduced in 2012, with the price reflecting the market price of ACCUs. In 2021, the Board formally approved the application of this carbon price to all future growth capital and investment decisions. We are continuing to embed this into our processes, with the objective of applying the carbon price to all capital projects, consistent with the Capital Allocation Framework, during 2023. The price in FY23 (this reporting period) was A$32 and was projected to increase to A$50 by 2026, A$65 by 2030, A$130 by 2040 and A$258 by 2050. The carbon price is embedded in our assessment of capex projects, with questions built into our CapIQ System to assess GHG reductions or increases associated with projects from the start of the capital investment process.*

## Row 2

## (5.3.2.1) Financial planning elements that have been affected

☑ Revenues
☑ Acquisitions

## (5.3.2.2) Effect type

☑ Risks
☑ Opportunities

## (5.3.2.3) Environmental issues relevant to the risks and/or opportunities that have affected these financial planning elements

*Select all that apply*
☑ Climate change

## (5.3.2.4) Describe how environmental risks and/or opportunities have affected these financial planning elements

*Risks which have a potential impact on revenues have been built into our internal revenue forecasting procedures. For example, the shift in demand for our explosives products from thermal coal mining customers in the US towards metals and copper customer markets is reflected in markets forecasts globally, and has been included in both our internal revenue forecasting and our business strategy, including the acquisition of Titanobel in 2022. With this purchase, Dyno Nobel entered the French quarry and construction market and gained access to New Caledonian and West African markets with future facing mineral opportunities. When combined with the existing Nitromak business in Turkey, this provides a compelling foundation to grow the business across Europe, the Middle East and Africa in future facing mineral customer markets.*

**Row 3**

## (5.3.2.1) Financial planning elements that have been affected

☑ Direct costs

## (5.3.2.2) Effect type

☑ Risks
☑ Opportunities

## (5.3.2.3) Environmental issues relevant to the risks and/or opportunities that have affected these financial planning elements

☑ Climate change

## (5.3.2.4) Describe how environmental risks and/or opportunities have affected these financial planning elements

*Direct costs are increasing, and being budgeted for, in the following areas:*
*1. Increasing external and internal costs and budgeting relating to GHG administration, data management and auditing, ASRS auditing (of the governance of climate-related risks and opportunities; of how well these are built into strategy; of global scope 1, 2 and 3) including specialist roles and consultants.*
*2. Increasing R&D spend to develop low GHG products and services*
*3. Increasing Opex associated with spend on GHG reduction systems, e.g., maintenance and catalysts required to maintain GHG reductions associated with tertiary abatement installations.*

**Row 4**

## (5.3.2.1) Financial planning elements that have been affected

☑ Direct costs
☑ Capital expenditures

## (5.3.2.2) Effect type

☑ Risks
☑ Opportunities

## (5.3.2.3) Environmental issues relevant to the risks and/or opportunities that have affected these financial planning elements

☑ Water

## (5.3.2.4) Describe how environmental risks and/or opportunities have affected these financial planning elements

*The risk of baseline water stress increasing at several sites in Australia could potentially result in either water restrictions impacting on production or, to avoid this, increasing water costs resulting from the need to source alternative water sources while maintaining the high water quality required by our chemical manufacturing sites. At our Gibson Island site in Brisbane, Australia, where water stress is projected to increase, we invested $4m in connection of the site to a recycled water source. At this site, we previously made ammonia using natural gas, and are working to convert this site to making ammonia using electrolysis of water with renewable energy to produce green ammonia. At other sites direct costs may increase for water.*

## (5.4) In your organization’s financial accounting, do you identify spending/revenue that is aligned with your organization’s climate transition?

| | Identification of spending/revenue that is aligned with your organization’s climate transition | Methodology or framework used to assess alignment with your organization’s climate transition |
|---|---|---|
| | ☑ Yes | ☑ Other methodology or framework |

## (5.4.1) Quantify the amount and percentage share of your spending/revenue that is aligned with your organization’s climate transition.

### Row 1

### (5.4.1.1) Methodology or framework used to assess alignment

☑ Other, please specify: Internal allocation

### (5.4.1.5) Financial metric

☑ CAPEX

### (5.4.1.6) Amount of selected financial metric that is aligned in the reporting year (currency)

*A$50,000,000*

### (5.4.1.7) Percentage share of selected financial metric aligned in the reporting year (%)

*10%*

### (5.4.1.8) Percentage share of selected financial metric planned to align in 2025 (%)

*10%*

## (5.4.1.9) Percentage share of selected financial metric planned to align in 2030 (%)

*0*

## (5.4.1.12) Details of the methodology or framework used to assess alignment with your organization's climate transition

*We presently only track the first order capital spent on major capex related decarbonisation initiatives. Due to uncertainty in the timing of the major capex projects in our decarbonisation pathway, we are unable to provide a specific figure for 2030 at this stage, so have entered a zero, but estimate a spend of A$100-110m to 2030.*

# (5.5) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

## (5.5.1) Investment in low-carbon R&D

☑ Yes

## (5.5.2) Comment

*Climate change presents all businesses with significant challenges. For our farming customers, these include finding ways to feed a growing population by increasing yields of food and fibre on less cleared land while reducing GHG emissions and nutrient losses to waterways. After applying nitrogen fertilisers, some of the nutrients can be lost from the soil under high moisture conditions where bacteria use nitrate nitrogen as an oxygen source. This process is termed denitrification and can produce N2O, a greenhouse gas (GHG). Aside from contributing to global warming, denitrification also means that crops and pastures lose valuable nitrogen, potentially impacting farm production and quality.*

*IPF has developed a range of Enhanced Efficiency Fertilisers (EEFs) which keep nitrogen (N) in a stable form for longer, maximising N uptake by crops and reducing losses to the air as GHG and to waterways through leaching. We also promote soils testing to support precision application of nutrients, so that only what is needed to maximise each crop is applied. During 2023, new research has continued to demonstrate the ability for grain growers, graziers and horticulturalists to reduce GHG from fertilisers using EEFs. One project studied the impacts of using a combination of eNpower, a proprietary nitrification inhibitor formulation containing dimethyl pyrazole glycolate (DMP-G) and EasyN, a urea ammonium nitrate solution. Results showed N2 O equivalent GHG emissions (kg/ha) more than halved over 36 days as a result of applying eNpower on EasyN applied soil, compared to just using EasyN.*

*Several other field trials in 2023 also showed substantial reductions in GHG with the use of inhibitors. In partnership with Latrobe University, we tested a blend of organomineral fertilisers applied to celery crops. The use of organo-mineral products and DMPP treated synthetic fertiliser reduced N2O emissions by between 55% and 82% compared with the standard practice of applying chicken manure and inorganic fertiliser during the cropping cycle. A separate trial aimed to quantify the effect of our Trigger humic acid granule when applied with NPKS fertiliser at a cabbage field in Bacchus Marsh.*

## (5.5.3) Provide details of your organization's investments in low-carbon R&D for chemical production activities over the last three years.

### Row 1

### (5.5.3.1) Technology area

☑ Radical process redesign

### (5.5.3.2) Stage of development in the reporting year

☑ Basic academic/theoretical research

### (5.5.3.3) Average % of total R&D investment over the last 3 years

*60%*

### (5.5.3.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

*0*

### (5.5.3.5) Average % of total R&D investment planned over the next 5 years

*0*

### (5.5.3.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

***Note: Spend on climate related R&D is not included in our R&D budget - it is financed under a separate Sustainability Capital allocation**. The 60% has been arrived at as the percentage of the R&D budget this would have been if it had been included in the R&D budget in the year it was spent.*

***Case Study: Investigating Solar Hydrogen:** The IPL 1.5oC scenario estimates that a US300 price on carbon would be required by 2030 to limit global warming to less than 2oC (Risk 4). The IPR scenario describes carbon pricing systems becoming widespread across the developed world as early as 2025, increasing to US65/t by 2030 and continuing to rapidly increase between 2030-2040, with international carbon pricing and boarder adjustment mechanisms also rapidly implemented from 2030. The IPL 3oC scenario describes a future in which global carbon pricing never emerges and carbon pricing is established in only some jurisdictions, which* *presents a risk that IPL's manufacturing facilities in the US & Australia may become uncompetitive due to this cost. In response, and also to mitigate the physical impacts of climate change (Risks 1,2,5,6) IPL has developed a Net Zero Pathway. In line with this, and driven by our Manufacturing Excellence & Profitable Growth Strategic Drivers, in 2020 we completed a 2.7m feasibility study, supported by the Australian Renewable Energy Agency. The study assessed the potential to use renewable hydrogen to increase ammonia production at our manufacturing facility at Moranbah, Queensland. Rather than being made from natural gas, renewable hydrogen can presently be made at very small plants using solar energy to split water into hydrogen and oxygen, allowing ammonia to be produced without the GHG associated with natural gas. The aim of the feasibility study was to determine whether renewable hydrogen can be made at an industrial scale, and at a commercially competitive price. Our study found that solar ammonia at an industrial scale was technically viable, and a facility was designed that could reliably provide a continuous supply of renewable hydrogen suitable for ammonia manufacturing. However, commercial feasibility requires either a price premium for the solar ammonia; a reduction in renewable energy prices; and/or an increase in grant funding of approximately A$395m, or approximately 60% of the estimated capex.*

### Row 2

## (5.5.3.1) Technology area

☑ Radical process redesign

## (5.5.3.2) Stage of development in the reporting year

☑ Full/commercial-scale demonstration

## (5.5.3.3) Average % of total R&D investment over the last 3 years

*30%*

## (5.5.3.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

*0*

## (5.5.3.5) Average % of total R&D investment planned over the next 5 years

*0*

## (5.5.3.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

***Note: Spend on climate related R&D is not included in our R&D budget - it is financed under a separate Sustainability Capital allocation****. The 30% has been arrived at as the percentage of the R&D budget this would have been if it had been included in the R&D budget in the year it was spent. Nothing was spent in FY23 due to the project waiting on a FID from our partner. We have not estimated future spend due to uncertainty as to whether it will proceed.*

***Case Study:*** *The Gibson Island Green Ammonia project is a partnership between IPL and FFI to investigate green ammonia production at Gibson Island. The site has used natural gas to produce hydrogen (H2) for the manufacture of ammonia (NH3) since it was built in 1969. The proposal under investigation is for FFI to construct an on-site water electrolysis plant to produce hydrogen from the electrolysis of water (H2 O) using renewable electricity, thereby dramatically reducing GHG emissions. FFI would develop and operate the hydrogen manufacturing facility, with IPL operating the ammonia manufacturing facility, using FFI's green hydrogen as the feedstock. The project progressed through front end engineering design (FEED) stage in 2022 and 2023 supported by an A13.7m ARENA grant, and a final investment decision is expected before the end of the calendar year.*

*The project will require government support to proceed. Should it secure this, it will be Australia's first industrial scale green ammonia production facility, demonstrating existing infrastructure can be retrofitted to utilise zero-emissions energy sources. The proposed water electrolysis facility would produce up to 70,000 tonnes of renewable hydrogen per year and replace all of Gibson Island's current gas feedstock and 99% of its natural gas energy use. This would result in a 44% reduction for Incitec Pivot Fertilisers against its 2020 baseline and a 17% reduction against IPL's 2020 baseline.*

*The Gibson Island Green Ammonia project could play an important role in developing Australia's hydrogen potential. While green hydrogen is not expected to be price competitive1 with natural gas for ammonia made for traditional uses until around 2040, ammonia made with green hydrogen has the potential to contribute significantly to the decarbonisation of energy systems and heavy vehicle transport by offering a practical, carbon-free way to store and transport the hydrogen in a safer form (as ammonia) as well as a green fuel in its own right.*

## Row 3

### (5.5.3.1) Technology area

☑ Other, please specify: International partnership to investigate green ammonia supply from Australia's hydrogen hubs

### (5.5.3.2) Stage of development in the reporting year

☑ Full/commercial-scale demonstration

### (5.5.3.3) Average % of total R&D investment over the last 3 years

*10%*

### (5.5.3.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

*0*

## (5.5.3.5) Average % of total R&D investment planned over the next 5 years

*0*

## (5.5.3.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

***Note: We have not included actual spend or forward spend due to commercial in confidence issues.*** *Spend on climate related R&D is not included in our R&D budget - it is financed under a separate Sustainability Capital allocation. The 10% has been arrived at as the percentage of the R&D budget this would have been if it had been included.*

***Case Study: Partnering with Keppel Infrastructure on Green Ammonia Production.***
*IPL has a core competency in the manufacture, storage and transportation of ammonia and is well placed to play a role in developing green ammonia for a low carbon economy. Green ammonia is produced using hydrogen from water electrolysed using renewable energy, rather than hydrogen made from natural gas. This eliminates the need for natural gas as both a feedstock and an energy source, greatly reducing GHG. Because the ammonia molecule is a carrier of hydrogen, green ammonia can be used as a feedstock/fuel for green energy generation, or to provide green hydrogen solutions for other industries, and it is much safer to handle and transport than hydrogen gas.*

*In 2021, we signed a Memorandum of Understanding (MOU) with Keppel Infrastructure Holdings Limited (Keppel Infrastructure) and Temasek to investigate the feasibility of producing green ammonia at industrial scale for export to meet the rapidly growing market demand for carbon-free energy in Asia. Since that time Keppel has invested in the CQ-H2 Central Queensland renewable hydrogen project at Gladstone. Based on the potential offtake of hydrogen from the CQ-H2 project, in May 2023 we signed a second MOU with Keppel to explore building a world-scale green ammonia production and export facility.*

*Should it proceed, the Gladstone facility would be capable of producing up to 850,000 tonnes of green ammonia per annum for both domestic and overseas consumption, potentially including an end-to-end export supply chain to Singapore and Asia. Keppel and IPL will work closely with the Queensland Government to explore all essential infrastructure, licences and approvals. Operating in a hard-to-abate sector means we need to be creative and explore a range of opportunities as we look to decarbonise beyond 2030 to our 2050 Net Zero Ambition.*

*The proposed green ammonia plant at Gladstone would allow Dyno Nobel to enter the emerging ammonia energy sector with tier 1 partners and provide business growth that is unconstrained by carbon emissions.*

**Row 4**

## (5.5.3.1) Technology area

☑ Other, please specify **:**Low GHG emitting fertilisers

## (5.5.3.2) Stage of development in the reporting year

☑ Small scale commercial deployment

## (5.5.3.3) Average % of total R&D investment over the last 3 years

*13%*

## (5.5.3.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

*A$3,600,000*

## (5.5.3.5) Average % of total R&D investment planned over the next 5 years

*10%*

## (5.5.3.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

***Note: Spend on climate related R&D is not included in our R&D budget - it is financed under a separate Sustainability Capital allocation**. The 13% has been arrived at as the percentage of the R&D budget this would have been, had it been included in the R&D budget in the year it was spent. Our investment in this area aligns with our strategy to reduce scope 3 emissions associated with customer use of our fertiliser products.*

*GHG from the use of nitrogenous fertilisers in fields is released in the form of nitrous oxide (N2O) which is a molecule with a warming potential approximately 300 times that of CO2. For this reason, this scope 3 source makes up 62% of our IPF business' total scope 3 GHG.*

*EEFs have been shown to reduce N2O from fertiliser use by up to 72% providing an effective and easy to implement GHG reduction for our farming customers, and for our own scope 3 GHG. We continue to develop and promote these.*

## (5.10) Does your organization use an internal price on environmental externalities?

| | Use of internal pricing of environmental externalities | Environmental externality priced |
|---|---|---|
| | ☑ Yes | ☑ Carbon |

## (5.10.1) Provide details of your organization's internal price on carbon.

### Row 1

### (5.10.1.1) Type of pricing scheme

☑ Shadow price

### (5.10.1.2) Objectives for implementing internal price

☑ Stress test investments
☑ Drive low-carbon investment
☑ Conduct cost-benefit analysis
☑ Identify and seize low-carbon opportunities
☑ Influence strategy and/or financial planning
☑ Incentivize consideration of climate-related issues in decision making
☑ Other, please specify**: Specifically, assess internal CAPEX applications**

### (5.10.1.3) Factors considered when determining the price

☑ Alignment to scientific guidance
☑ Alignment with the price of allowances under an Emissions Trading Scheme
☑ Scenario analysis

## (5.10.1.4) Calculation methodology and assumptions made in determining the price

*A range of sources were used when determining the price including, but not limited to, the following:*

- *LSEG Data and Analytics,*
- *CPI,*
- *ACCU Market analysis,*
- *Australia's long term GHG emissions reduction plan,*
- *NGFS scenarios,*
- *the IEA's Global Energy and Climate Model Documentation,*
- *Data from the International Carbon Action Partnership, Forecast carbon offset prices, the Report of the High-level Commission on Carbon Prices, and the IMF Proposal for an International Carbon Price Floor Among Large Emitters.*

*The current price and price trajectory falls between our 1.5oC and 2oC scenarios, as outlined in our 2023 Climate Change Report.*

## (5.10.1.5) Scopes covered

☑ Scope 1

☑ Scope 2

☑ Scope 3, Category 1 - Purchased goods and services

## (5.10.1.6) Pricing approach used – spatial variance

☑ Uniform

## (5.10.1.8) Pricing approach used – temporal variance

☑ Evolutionary

## (5.10.1.9) Indicate how you expect the price to change over time

*Internal carbon pricing has been included in capital expenditure assessments for projects at our major manufacturing sites in Australia since Australian Carbon Credit Units (ACCUs) were introduced in 2012, with the price reflecting the market price of ACCUs. In 2021, the Board formally approved the application of this carbon price to all future growth capital and investment decisions. We are continuing to embed this into our processes, with the objective of applying the carbon price to all capital projects, consistent with the Capital Allocation Framework, during 2023. The price is currently A$32, and is projected to increase to A$50 by 2026, A$65 by 2030, A$130 by 2040 and A$258 by 2050. A range of carbon prices are also included in our scenario analyses.*

## (5.10.1.10) Minimum actual price used (currency per metric ton CO2e)

*32*

## (5.10.1.11) Maximum actual price used (currency per metric ton CO2e)

*32*

## (5.10.1.12) Business decision-making processes the internal price is applied to

☑ Capital expenditure
☑ Operations
☑ Risk management
☑ Opportunity management

## (5.10.1.13) Internal price is mandatory within business decision-making processes

☑ Yes, for some decision-making processes, please specify**:** For Capex

## (5.10.1.14) % total emissions in the reporting year in selected scopes this internal price covers

*100%*

## (5.10.1.15) Pricing approach is monitored and evaluated to achieve objectives

☑ Yes

## (5.10.1.16) Details of how the pricing approach is monitored and evaluated to achieve your objectives

*The capex projects which reduce or increase GHG are tracked through Sceptre, our Capex management tool. IPL refreshes its future looking carbon price trajectory every three years in line with its climate scenario refresh.*

## (5.11) Do you engage with your value chain on environmental issues?

| | Engaging with this stakeholder on environmental issues | Environmental issues covered |
|---|---|---|
| Suppliers | *Select from:*<br>☑ Yes | *Select all that apply*<br>☑ Climate change<br>☑ Plastics |
| Customers | *Select from:*<br>☑ Yes | *Select all that apply*<br>☑ Climate change<br>☑ Plastics |
| Investors and shareholders | *Select from:*<br>☑ Yes | *Select all that apply*<br>☑ Climate change |
| Other value chain stakeholders | *Select from:*<br>☑ Yes | *Select all that apply*<br>☑ Climate change<br>☑ Plastics |

## (5.11.1) Does your organization assess and classify suppliers according to their dependencies and/or impacts on the environment?

### Climate change

### (5.11.1.1) Assessment of supplier dependencies and/or impacts on the environment

☑ Yes, we assess the dependencies and/or impacts of our suppliers

### (5.11.1.2) Criteria for assessing supplier dependencies and/or impacts on the environment

☑ Contribution to supplier-related Scope 3 emissions

☑ Impact on plastic waste and pollution

### (5.11.1.3) % Tier 1 suppliers assessed

☑ 1-25%

### (5.11.1.4) Define a threshold for classifying suppliers as having substantive dependencies and/or impacts on the environment

*IPL considers the suppliers of high GHG intensity products, such as EITE (Emissions Intensive Trade Exposed) products as having a substantive impact on the environment*

### (5.11.1.5) % Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment

☑ 1-25%

### (5.11.1.6) Number of Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment

*50*

## Plastics

### (5.11.1.1) Assessment of supplier dependencies and/or impacts on the environment

☑ Yes, we assess the dependencies and/or impacts of our suppliers

### (5.11.1.2) Criteria for assessing supplier dependencies and/or impacts on the environment

☑ Impact on plastic waste and pollution

### (5.11.1.3) % Tier 1 suppliers assessed

☑ 76-99%

### (5.11.1.4) Define a threshold for classifying suppliers as having substantive dependencies and/or impacts on the environment

*IPF consider suppliers of WPP fertiliser bags which do not contain a recycled content as having a substantiative impact on the environment.*

### (5.11.1.5) % Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment

☑ Less than 1%

### (5.11.1.6) Number of Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment

*4*

## (5.11.2) Does your organization prioritize which suppliers to engage with on environmental issues?

## Climate change

### (5.11.2.1) Supplier engagement prioritization on this environmental issue

☑ Yes, we prioritize which suppliers to engage with on this environmental issue

### (5.11.2.2) Criteria informing which suppliers are prioritized for engagement on this environmental issue

☑ Material sourcing
☑ Procurement spend
☑ Product lifecycle
☑ Regulatory compliance
☑ Business risk mitigation
☑ Vulnerability of suppliers
☑ Product safety and compliance
☑ Supplier performance improvement

☑ In line with the criteria used to classify suppliers as having substantive dependencies and/or impacts relating to climate change

## (5.11.2.4) Please explain

*IPL is currently developing its processes to track and manage Scope 3 GHG in our upstream supply chain and aims to have these in place by FY25. As we do not have long term contracts in place for some GHG intensive product purchases and our value chain extends globally, we are still in the process of obtaining supplier specific emissions factors and use EcoInvent cradle-to-gate emissions factors for region and country where we do not yet have supplier specific factors. We are incorporating the consideration of these GHG factors into our procurement systems but also need to consider safety performance, shipping distances, supply chain risks, supplier environmental performance, supplier human rights and modern slavery performance, cost and security of supply issues.*

### Plastics

## (5.11.2.1) Supplier engagement prioritization on this environmental issue

☑ Yes, we prioritize which suppliers to engage with on this environmental issue

## (5.11.2.2) Criteria informing which suppliers are prioritized for engagement on this environmental issue

☑ In line with the criteria used to classify suppliers as having substantive dependencies and/or impacts relating to plastics
☑ Procurement spend
☑ Product safety and compliance
☑ Regulatory compliance
☑ Strategic status of suppliers

## (5.11.2.4) Please explain

*IPL has recently secured a contract for supply of fertiliser packaging with a 30% recycled content, with supply beginning in 2024. Prior to this, safety concerns associated with the handling of one tonne fertiliser bags meant that bags with recycled content were not previously been available.*

## (5.11.5) Do your suppliers have to meet environmental requirements as part of your organization’s purchasing process?

### Climate change

### (5.11.5.1) Suppliers have to meet specific environmental requirements related to this environmental issue as part of the purchasing process

☑ No, but we plan to introduce environmental requirements related to this environmental issue within the next two years

### (5.11.5.2) Policy in place for addressing supplier non-compliance

☑ Yes, we have a policy in place for addressing non-compliance

### (5.11.5.3) Comment

*There are likely to be contracts in the future in which criteria related to GHG intensity (or stipulating that supply will be provided from a particular supplier facility which has a lower GHG intensity per tonne) may be included, however this is not currently the case. In this event, we have a policy in place to address supplier non-compliance with conditions in contracts.*

## (5.11.7) Provide further details of your organization’s supplier engagement on environmental issues.

### Climate change

### (5.11.7.2) Action driven by supplier engagement

☑ Emissions reduction

### (5.11.7.3) Type and details of engagement

**Capacity building**

☑ Provide training, support and best practices on how to measure GHG emissions

☑ Other capacity building activity, please specify: Supply GHG questionnaire to assist suppliers in calculating their Scope 1,2 and 3 GHG

## (5.11.7.4) Upstream value chain coverage

☑ Tier 1 suppliers

## (5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement

☑ Unknown

## (5.11.7.6) % of tier 1 supplier-related scope 3 emissions covered by engagement

☑ 1-25%

## (5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

*IPL has developed a Scope 3 GHG Supplier Questionnaire which includes questions to assist suppliers who have never calculated their GHG to calculate their GHG for the first time.*

## (5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

☑ Yes

### Plastics

## (5.11.7.2) Action driven by supplier engagement

☑ Circular economy

## (5.11.7.3) Type and details of engagement

**Innovation and collaboration**

☑ Collaborate with suppliers on innovations to reduce environmental impacts in products and services

## (5.11.7.4) Upstream value chain coverage

☑ Tier 1 suppliers

## (5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement

☑ Unknown

## (5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

*IPL has been requesting WWP bags with a recycled content from our one tonne and small pack (25kg) fertiliser bags for several years. Our supplier has worked to develop a bag with 30% recycled content, which will be available in 2024.*

## (5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

☑ Yes

# (5.11.9) Provide details of any environmental engagement activity with other stakeholders in the value chain.

## Climate change

## (5.11.9.1) Type of stakeholder

☑ Customers

## (5.11.9.2) Type and details of engagement

**Innovation and collaboration**

☑ Other innovation and collaboration, please specify: Partner with customers for collection and recycling of plastic product packaging

## (5.11.9.3) % of stakeholder type engaged

☑ 100%

## (5.11.9.4) % stakeholder-associated scope 3 emissions

☑ 26-50%

## (5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

*We engage with 100% of our fertiliser customers to reduce our impact via the collection and recycling of our WPP one tonne and small pack fertiliser bags. Eighty-five percent of IPL's products are delivered in bulk and require no packaging but our one-tonne and 25kg bags are made from woven polypropylene (WPP) and low-density polypropylene (LDPE). To divert these bags from landfill, we encourage customers to return them to us, or drop them at the nearest Big Bag Recovery collection point.*

*Participation in the program allowed Big Bag Recovery to recover 305,077 kilograms of waste farm plastic from our customers in 2022. Recycling this packaging waste also avoided an estimated 448 tCO2 e in GHG and around 2,500 in landfill costs. In 2023, we continued to promote the collection and recycling of our fertiliser bags through Big Bag Recovery, who collected 310 tonnes of our woven polypropylene (WPP) plastic packaging from our farming customers and dealers for recycling. In addition to reducing our impact, there is the additional rational of offering our customers a solution for disposal of our fertiliser bags as a value adding proposition.*

## (5.11.9.6) Effect of engagement and measures of success

*Participation in the program allowed Big Bag Recovery to recover 305,077 kilograms of waste farm plastic from our customers in 2022. Recycling this packaging waste also avoided an estimated 448 tCO2 e in GHG and around 2,500 in landfill costs. In 2023, we continued to promote the collection and recycling of our fertiliser bags through Big Bag Recovery, who collected 310 tonnes of our woven polypropylene (WPP) plastic packaging from our farming customers and dealers for recycling*

### Climate change

## (5.11.9.1) Type of stakeholder

☑ Other value chain stakeholder, please specify **:**Government approved packaging stewardship body

## (5.11.9.2) Type and details of engagement

**Innovation and collaboration**

☑ Other innovation and collaboration, please specify**:** Partner with government accredited packaging stewardship body to collect and recycle plastic product packaging

## (5.11.9.3) % of stakeholder type engaged

☑ 1-25%

## (5.11.9.4) % stakeholder-associated scope 3 emissions

☑ 26-50%

## (5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

*We engage with 100% of our fertiliser customers to collect and recycle our WPP one tonne and small pack fertiliser bags. Eighty-five percent of IPL's products are delivered in bulk and require no packaging but our one-tonne and 25kg bags are made from woven polypropylene (WPP) and low-density polypropylene (LDPE). To divert these bags from landfill, we encourage customers to return them to us, or drop them at the nearest Big Bag Recovery collection point. Participation in the program allowed Big Bag Recovery to recover 305,077 kilograms of waste farm plastic from our customers in 2022. Recycling this packaging waste also avoided an estimated 448 tCO2 e in GHG and around 2,500 in landfill costs. In 2023, we continued to promote the collection and recycling of our fertiliser bags through Big Bag Recovery, who collected 310 tonnes of our woven polypropylene (WPP) plastic packaging from our farming customers and dealers for recycling*

## (5.11.9.6) Effect of engagement and measures of success

*Participation in the program allowed Big Bag Recovery to recover 305,077 kilograms of waste farm plastic from our customers in 2022. Recycling this packaging waste also avoided an estimated 448 tCO2 e in GHG and around 2,500 in landfill costs. In 2023, we continued to promote the collection and recycling of our fertiliser bags through Big Bag Recovery, who collected 310 tonnes of our woven polypropylene (WPP) plastic packaging from our farming customers and dealers for recycling*

### Climate change

## (5.11.9.1) Type of stakeholder

☑ Investors and shareholders

## (5.11.9.2) Type and details of engagement

**Education/Information sharing**

☑ Share information on environmental initiatives, progress and achievements

## (5.11.9.3) % of stakeholder type engaged

☑ 100%

## (5.11.9.4) % stakeholder-associated scope 3 emissions

☑ Unknown

## (5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

*We engage with 100% of our investors to inform them of our actions in assessing and managing the risks and opportunities associated with climate change, including our Net Zero Pathway and progress in decarbonising our operations and value chains. The rational for this is to demonstrate, to both investors and potential investors, that we are managing the risks an opportunities associated with climate change in the short, medium and long term in order to maintain sustainable returns for investors. We engage through face-to-face investor meetings on climate change, our annual Climate Change Reports, Investor Day Presentations, emails and responses to emails, and through our participation in investor ratings indices such as CDP, the S&P Global CSA and EcoVadis.*

## (5.11.9.6) Effect of engagement and measures of success

*The effect of this engagement has been a dialogue with investors on our progress. The measure of success is reflected in the results of a non-binding, advisory vote to shareholders at the 2022 IPL Annual General Meeting, which received a strong 89.93% approval by shareholders. This non-binding, advisory vote will be held at least every three years and will complement IPL's continued engagement with shareholders and other stakeholders about the risks and opportunities climate change presents for IPL's business.*

## C6. Environmental Performance - Consolidation Approach

### (6.1) Provide details on your chosen consolidation approach for the calculation of environmental performance data.

### Climate change

#### (6.1.1) Consolidation approach used

☑ Operational control

#### (6.1.2) Provide the rationale for the choice of consolidation approach

*IPL currently collects and reports on its Scope 1, 2 and 3 GHG using operational control in line with NGER requirements. Where we have a JV where we do not have operational control (i.e., we own less than 51% and our HSEC management systems are not in place at the organisation) those GHG are included in our Scope 3 GHG. For this reason, the GHG for the current reporting year are also reported in this manner.*

### Water

#### (6.1.1) Consolidation approach used

☑ Operational control

#### (6.1.2) Provide the rationale for the choice of consolidation approach

*IPL currently collects and reports on its Scope 1, 2 and 3 GHG using operational control in line with NGER requirements. Where we have a JV where we do not have operational control (i.e., we own less than 51% and our HSEC management systems are not in place at the organisation) those GHG are included in our Scope 3 GHG. For this reason, and because we cannot easily obtain usage data at facilities in which we do not have our operational and reporting processes in place, the water use and discharge for the current reporting year are also reported in this manner.*

### Plastics

#### (6.1.1) Consolidation approach used

☑ Operational control

## (6.1.2) Provide the rationale for the choice of consolidation approach

*IPL currently collects and reports on its Scope 1, 2 and 3 GHG using operational control in line with NGER requirements. Where we have a JV where we do not have operational control (i.e., we own less than 51% and our HSEC management systems are not in place at the organisation) those GHG are included in our Scope 3 GHG. For this reason, and because we cannot easily obtain usage data at facilities in which we do not have our operational and reporting processes in place, the plastics information for the current reporting year is also reported in this manner.*

### Biodiversity

## (6.1.1) Consolidation approach used

*Select from:*

☑ Operational control

## (6.1.2) Provide the rationale for the choice of consolidation approach

*IN FY23 we conducted a TNFD Leap assessment for our fertilisers business, which is wholly owned and operated by IPL. In addition, our policies regarding flora and fauna and our HSEC Management system only applies to operations over which we have operational control. For this reason, the information disclosed this year which related to biodiversity is also reported in this manner.*

# C7. Environmental performance - Climate Change

## (7.1) Is this your first year of reporting emissions data to CDP?

☑ No

## (7.1.1) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

| | Has there been a structural change? |
|---|---|
| | ☑ No |

## (7.1.2) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

| | Change(s) in methodology, boundary, and/or reporting year definition? |
|---|---|
| | ☑ No |

## (7.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

☑ The Greenhouse Gas Protocol: Scope 2 Guidance
☑ Australia - National Greenhouse and Energy Reporting Act
☑ IPCC Guidelines for National Greenhouse Gas Inventories, 2006
☑ US EPA Emissions & Generation Resource Integrated Database (eGRID)
☑ The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Standard
☑ The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
☑ US EPA Center for Corporate Climate Leadership: Direct Emissions from Mobile Combustion Sources
☑ US EPA Center for Corporate Climate Leadership: Direct Emissions from Stationary Combustion Sources
☑ The Greenhouse Gas Protocol Agricultural Guidance: Interpreting the Corporate Accounting and Reporting Standard for the Agricultural Sector
☑ Other, please specify: BEIS Greenhouse gas reporting: Conversion factors 2021: full set - revised January 2022. Department for Business, Energy & Industrial Strategy, UK Government. https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2021

## (7.3) Describe your organization's approach to reporting Scope 2 emissions.

| | Scope 2, location-based | Scope 2, market-based | Comment |
|---|---|---|---|
| | ☑ We are reporting a Scope 2, location-based figure | ☑ We have operations where we are able to access electricity supplier emission factors or residual emissions factors, but are unable to report a Scope 2, market-based figure | *The reporting of a market based figure will not differ greatly from a location based figure at this stage.* |

## (7.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

☑ Yes

## (7.4.1) Provide details of the sources of Scope 1, Scope 2, or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure.

### Row 1

#### (7.4.1.1) Source of excluded emissions

*Emissions from electricity used in small remote offices and despatch sites in North America.*

#### (7.4.1.2) Scope(s) or Scope 3 category(ies)

☑ Scope 2 (location-based)

#### (7.4.1.4) Relevance of location-based Scope 2 emissions from this source

☑ Emissions are not relevant

#### (7.4.1.10) Explain why this source is excluded

*Usage data from these small offices and distribution sites has not been collected. During the reporting period, we selected a bill scanning service provide to allow us to obtain this data for FY24 reporting (next year)*

#### (7.4.1.11) Explain how you estimated the percentage of emissions this excluded source represents

*Using similar site for which we do have data, we estimate that these sites make up less than 1% of total global Scope 1&2 GHG.*

## (7.5) Provide your base year and base year emissions.

### Scope 1

### (7.5.1) Base year end

*09/30/2020*

### (7.5.2) Base year emissions (metric tons CO2e)

*3646215.0*

### (7.5.3) Methodological details

***Greenhouse Gas Emissions data:*** *Scope 1 and 2 greenhouse gas emissions are calculated based on the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition).*

***Australian Scope 1 and 2 GHG emissions:***

- *Australian Government Clean Energy Regulator (2022) National Greenhouse and Energy Reporting (Measurement) Determination 2008. https://www.cleanenergyregulator.gov.au/NGER/ Legislation/Measurement-Determination*
- *Department of Climate Change, Energy, Environment and Water (2021) National Greenhouse Accounts (NGA) Factors (2021). https://www.dcceew.gov.au/climate-change/publications/ national-greenhouse-accounts-factors-2021*
- *Australian Government Clean Energy Regulator (2022) EERS release 2021–22. https://www.cleanenergyregulator.gov.au/ OSR/EERS/eers-current-release*

***Americas Scope 1 and 2 GHG emissions:***

- *US Electricity: USEPA (2022) eGRID2020 Summary Tables, USEPA eGRID 2020. Retrieved Oct 2022 from https://www.epa.gov/egrid/summary-data*
- *US Fuels: USEPA (2022) Emission Factors for Greenhouse Gas Inventories. Retrieved Oct 2022 from https://www.epa.gov/system/files/documents/2022-04/ ghg_emission_factors_hub.pdf*
- *Canada Fuels: USEPA (2022) Emission Factors for Greenhouse Gas Inventories, Retrieved Oct 2022 from https://www.epa.gov/system/files/documents/2022-04/ ghg_emission_factors_hub.pdf*
- *Canada Electricity: International Energy Agency (2022) Canada. Retrieved Oct 2022 from https://www.iea.org/countries/canada*
- *Mexico Electricity: Institute for Global Environmental Strategies (2022). List of Grid Emission Factors version 11.0. Retrieved Oct 2022 from https://pub.iges.or.jp/pub/iges-list-grid-emission-factors*
- *Chile Electricity: Ministry of Energy, Chile (2022) Emission Factors. Retrieved Oct 2022 from http://energiaabierta.cl/visualizaciones/factor-de-emision-sic-sing*

***European Scope 1 and 2 GHG emissions****:*

- *UK Department for Business, Energy and Industrial Strategy (2022) Greenhouse gas reporting: conversion factors 2022. Retrieved Oct 2022 from https://www.gov.uk/government/publications/ greenhouse-gas-reporting-conversion-factors-2022*

## Scope 2 (location-based)

## (7.5.1) Base year end

*09/30/2020*

## (7.5.2) Base year emissions (metric tons CO2e)

*345181.0*

## (7.5.3) Methodological details

***Greenhouse Gas Emissions data:*** *Scope 1 and 2 greenhouse gas emissions are calculated based on the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition).*

***Australian Scope 1 and 2 GHG emissions:***

- *Australian Government Clean Energy Regulator (2022) National Greenhouse and Energy Reporting (Measurement) Determination 2008. https://www.cleanenergyregulator.gov.au/NGER/ Legislation/Measurement-Determination*
- *Department of Climate Change, Energy, Environment and Water (2021) National Greenhouse Accounts (NGA) Factors (2021). https://www.dcceew.gov.au/climate-change/publications/ national-greenhouse-accounts-factors-2021*
- *Australian Government Clean Energy Regulator (2022) EERS release 2021–22. https://www.cleanenergyregulator.gov.au/ OSR/EERS/eers-current-release*

***Americas Scope 1 and 2 GHG emissions:***

- *US Electricity: USEPA (2022) eGRID2020 Summary Tables, USEPA eGRID 2020. Retrieved Oct 2022 from https://www.epa.gov/egrid/summary-data*
- *US Fuels: USEPA (2022) Emission Factors for Greenhouse Gas Inventories. Retrieved Oct 2022 from https://www.epa.gov/system/files/documents/2022-04/ ghg_emission_factors_hub.pdf*
- *Canada Fuels: USEPA (2022) Emission Factors for Greenhouse Gas Inventories, Retrieved Oct 2022 from https://www.epa.gov/system/files/documents/2022-04/ ghg_emission_factors_hub.pdf*
- *Canada Electricity: International Energy Agency (2022) Canada. Retrieved Oct 2022 from https://www.iea.org/countries/canada*
- *Mexico Electricity: Institute for Global Environmental Strategies (2022). List of Grid Emission Factors version 11.0. Retrieved Oct 2022 from https://pub.iges.or.jp/pub/iges-list-grid-emission-factors*
- *Chile Electricity: Ministry of Energy, Chile (2022) Emission Factors. Retrieved Oct 2022 from http://energiaabierta.cl/visualizaciones/factor-de-emision-sic-sing*

***European Scope 1 and 2 GHG emissions****:*

- *UK Department for Business, Energy and Industrial Strategy (2022) Greenhouse gas reporting: conversion factors 2022. Retrieved Oct 2022 from https://www.gov.uk/government/publications/ greenhouse-gas-reporting-conversion-factors-2022*

## Scope 2 (market-based)

### (7.5.1) Base year end

*09/29/2020*

### (7.5.2) Base year emissions (metric tons CO2e)

*345181.0*

### (7.5.3) Methodological details

*IPL has here reported a Scope 2 location-based figure, since we cannot presently report a market-based figure.*

## Scope 3 category 1: Purchased goods and services

### (7.5.1) Base year end

*09/30/2020*

### (7.5.2) Base year emissions (metric tons CO2e)

*3151000*

### (7.5.3) Methodological details

*Calculation status Material. Calculated.*

*Calculation boundary: This category covers emissions generated upstream of IPL's operations associated with the manufacture of purchased fertilisers, explosives and chemical products, from the moment resources are mined, extracted, or grown to make these products, through all processing, manufacturing and transport to the exit at our suppliers' gates. The manufacture of many of these products, such as ammonia-based fertilisers and explosives, are classified as Emissions Intensive Trade Exposed (EITE) activities under the Australian National Greenhouse and Energy Reporting (NGER) system and are the most material contributors to this category. Exclusions Only the emissions associated with purchased chemical products (and the proportion of expenditure and volume they represent) are included. Due to the high emissions intensity of these products, these sources are estimated to include the majority of IPL's scope 3 emissions in this category.*

*Calculation methodology: Total tonnes purchased of each material is extracted from IPL's internal purchasing system for each financial year period. A scope 3 emissions factor specific to each material was then applied per tonne (see 'References' below). Data sources 'Annual tonnes purchased' data is extracted from the IPL internal system that tracks all external spend.*

*Emissions factor references*
*» GHG Protocol Technical Guidance for Calculating scope 3 Emissions (v1): Supplement to the Corporate Value Chain scope 3) Accounting and Reporting Standard; WRI/WBCSD; 2013; https://ghgprotocol.org/ scope-3-technical-calculation-guidance*
*» National Greenhouse Accounts Factors: Australian National Greenhouse Accounts, October 2020; Australian Government Department of Industry, Science, Energy and Resources; 2020; https://www.industry.gov.au/sites/default/files/2020-10/national-greenhouse-accountsfactors-2020.pdf*
*» EcoInvent (licenced database) ecoinvent.org*
*» Wood, S. & Cowie, Annette. (2004). A Review of Greenhouse Gas Emission Factors for Fertiliser Production; https://www.researchgate.net/figure/Greenhouse-Gas-Emission-Factors-for-Phosphate-Fertilisers_tbl4_235704822*

## Scope 3 category 2: Capital goods

### (7.5.1) Base year end

*09/30/2020*

### (7.5.2) Base year emissions (metric tons CO2e)

*0.0*

### (7.5.3) Methodological details

*Category description Upstream (i.e. cradle-to-gate) emissions from the extraction, production and transportation of capital goods purchased or acquired by the reporting company in the reporting year. Calculation status Not material. Not calculated. Explanation Based on industry intensity factors applied to IPL's annual capital goods expenditure, emissions from this category are not considered to be material.*

## Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

### (7.5.1) Base year end

*09/30/2020*

### (7.5.2) Base year emissions (metric tons CO2e)

*657000.0*

### (7.5.3) Methodological details

*Calculation status Material. Calculated. Exclusions None.*

*Calculation boundary This category covers emissions arising from the extraction, production and delivery of fuels, including diesel, gasoline, LPG, greases, oils and lubricants, and electricity purchased by the operations over which IPL has operational control. Due to IPL's use of natural gas as both an energy source and a feedstock for hydrogen to make ammonia, the emissions associated with the upstream extraction, processing and pipeline delivery of natural and coal seam gas, including fugitive emissions, are material contributors to this category.*

*Calculation methodology Total energy and fuels purchased (volumes) have been multiplied by a scope 3 emission factor specific to each fuel. Data sources For natural gas (GJ) and electricity (kWh) purchased, data is collected from invoices. For all other fuels, 'annual volumes purchased' data is extracted from the IPL internal system that tracks all external spend.*

*Emissions factor references*
*» GHG Protocol Technical Guidance for Calculating scope 3 Emissions (v1): Supplement to the Corporate Value Chain (scope 3) Accounting and Reporting Standard; WRI/WBCSD; 2013; https://ghgprotocol.org/scope-3-technical-calculation-guidance*
*» National Greenhouse Accounts Factors: Australian National Greenhouse Accounts, October 2020; Australian Government Department of Industry, Science, Energy and Resources; 2020; https://www. dcceew.gov.au/sites/default/files/documents/national-greenhouse-accounts-factors-2020.pdf*
*» National Inventory Report 2018, Volume 1; Australian Government Department of Industry, Science, Energy and Resources; 2020; https://www.industry.gov.au/sites/default/files/2020-05/nga-nationalinventory-report-2018-volume-1.pdf » eGRID Summary Tables, Table 1 'Non-baseload output emission rates'. USEPA; https://www.epa.gov/sites/default/files/2021-02/documents/egrid2019_summary_tables.pdf*
*» The Emissions and generation Resource Integrated Data Base eGRID Technical Guide, USEPA; https://www.epa.gov/system/files/documents/2022-01/egrid2020_technical_guide.pdf » BEIS Greenhouse gas reporting: Conversion factors 2021: full set (for advanced users) – revised January 2022, Tab WTT-Fuels; Department for Business, Energy & Industrial Strategy, UK Government. https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2021*

## Scope 3 category 4: Upstream transportation and distribution

## (7.5.1) Base year end

*09/30/2020*

## (7.5.2) Base year emissions (metric tons CO2e)

*430000.0*

## (7.5.3) Methodological details

*Calculation status: Not material. Calculated. Exclusions: None.*

*Calculation boundary This category includes the scope 3 emissions associated with the shipping, rail and trucking of our purchased goods from Tier 1 suppliers by third parties. It should be noted that natural gas used as feedstock for the chemical manufacture of ammonia is delivered via pipeline – scope 3 emissions associated with the delivery of this raw material are reported under Category 3.*

*Calculation methodology: For marine cargoes to and around Australia, RightShip – a leading maritime risk management and environmental assessment organisation – provided an accurate scope 3 emissions estimate based on its EN16258:2012 certified methodology. For marine cargoes associated with our subsidiary Quantum Fertilisers, and for road and rail freight, the 'distance-based' method as described in the scope 3 Guidance was used: emissions were calculated by applying the appropriate emissions factor to the 'mass x distance' multiplier for each mode of transport.*

*Data sources: Tonnes shipped and transported by road and rail were collected from a range of sources including the IPL internal system that tracks all external spend, internal logistics support software and third party reports from logistics suppliers such as RightShip and several road transport contractors. Activity data from external service providers are converted to net tonne kilometres for rail, road and shipping, and the appropriate emissions factor was applied (see references below).*

*Emissions factor references*
*» RightShip Carbon Accounting; https://www.rightship.com/solutions/shipowner/ghg-rating/*
*» GHG Protocol Technical Guidance for Calculating Scope 3 Emissions (v1): Supplement to the Corporate Value Chain (Scope 3) Accounting and Reporting Standard; WRI/WBCSD; 2013; https://ghgprotocol.org/scope-3-technical-calculation-guidance*
*» BEIS Greenhouse gas reporting: Conversion factors 2021: full set (for advanced users) – revised January 2022, Tab Freighting goods  WTT delivery vehs & freight; Department for Business, Energy & Industrial Strategy, UK Government. https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2021*

## Scope 3 category 5: Waste generated in operations

## (7.5.1) Base year end

*09/30/2020*

## (7.5.2) Base year emissions (metric tons CO2e)

*6000.0*

## (7.5.3) Methodological details

*Calculation status: Not material. Calculated. Exclusions: None*

*Calculation boundary: This category includes scope 3 emissions associated with all of the waste generated by the operations over which IPL has operational control.*

*Calculation methodology: For wastes generated by our Australian sites, the supplier-specific method was used, whereby a national waste contractor supplied waste-specific emissions factors. For wastes in Australia disposed of by other waste contractors, and for sites outside of Australia, the average-data method was used. This involves estimating emissions based on total tonnes waste going to each disposal method (e.g. landfill) multiplied by an average emission factor for each disposal method.*

*Data sources: Annual reports from Australian waste management provider; the internal SAI Global data base used by IPL to collect and manage data associated with monthly site reports on energy use, water use and waste; relevant emissions factors (see references below).*

*Emissions factor references*
*» GHG Protocol Technical Guidance for Calculating Scope 3 Emissions (v1): Supplement to the Corporate Value Chain (Scope 3) Accounting and Reporting Standard; WRI/WBCSD; 2013; https://ghgprotocol.org/scope-3-technical-calculation-guidance*
*» National Greenhouse Accounts Factors: Australian National Greenhouse Accounts, October 2020; Australian Government Department of Industry, Science, Energy and Resources; 2020; https://www.industry.gov.au/sites/default/files/2020-10/national-greenhouse-accounts-factors-2020.pdf*
*» BEIS Greenhouse gas reporting: Conversion factors 2021: full set (for advanced users) – revised January 2022, Tab Waste Disposal; Department for Business, Energy & Industrial Strategy, UK Government. https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2021*
*» EcoInvent (licenced database) ecoinvent.org*

## Scope 3 category 6: Business travel

## (7.5.1) Base year end

*09/30/2020*

## (7.5.2) Base year emissions (metric tons CO2e)

*7000.0*

## (7.5.3) Methodological details

*Calculation status: Not material. Calculated.*

*Calculation boundary: This category includes flights and accommodation taken by employees for business-related activities, and travel outside of Australia in vehicles not owned or operated by IPL. Emissions associated with employee travel by hire car within Australia are defined as being under IPL employee operational control under Australian National Greenhouse and Energy Reporting legislation, and are therefore calculated and reported as scope 1 emissions.*

*Calculation methodology: Estimate based on peer extrapolation. The methodology for Business Travel was developed by assessing these scope 3 categories from three of IPL's peers. Emissions figures were extracted from sustainability reports and/or CDP reporting. The average was determined for tCO2 e/employee for each category across these peers. This was then multiplied by IPL's employee numbers for the relevant years.*

*Data sources: Peer Sustainability reports/CDP responses.*

*Emissions factor references: No emissions factors were used to derive the GHG in this category. Rather, the total GHG were estimated based on peer extrapolation.*

## Scope 3 category 7: Employee commuting

### (7.5.1) Base year end

*09/30/2020*

### (7.5.2) Base year emissions (metric tons CO2e)

*700.0*

### (7.5.3) Methodological details

*Calculation status Not material. Calculated.*

*Calculation methodology: Estimate based on peer extrapolation. The methodology for Employee Commuting was developed by assessing these scope 3 categories from three of IPL's peers. Emissions figures were extracted from sustainability reports and/or CDP reporting. The average was determined for tCO2 e/employee for each category across these peers. This was then multiplied by IPL's employee numbers for the relevant years. Data sources Peer Sustainability reports/CDP responses. Emissions factor references No emissions factors were used to drive the GHG in this category. Rather, the total GHG were estimated based on peer extrapolation.*

## Scope 3 category 8: Upstream leased assets

### (7.5.1) Base year end

*09/30/2020*

### (7.5.2) Base year emissions (metric tons CO2e)

*0.0*

### (7.5.3) Methodological details

*Calculation status: Not relevant. Not calculated. Explanation IPL has very few upstream leased assets. In Australia, where properties are leased and electricity use is included in the lease (rather than invoiced directly to IPL) an estimate of electricity use is made in accordance with the National Greenhouse and Energy Reporting legislation, ensuring that this energy use is included in IPL's scope 2 and Scope 3 GHG emissions under 'Fuel and Energy'.*

## Scope 3 category 9: Downstream transportation and distribution

### (7.5.1) Base year end

*09/30/2020*

### (7.5.2) Base year emissions (metric tons CO2e)

*0.0*

### (7.5.3) Methodological details

*Calculation status Not material. Calculated – included in Category 4.*

*Calculation boundary This category includes emissions associated with the transport of products sold by IPL in vehicles not owned or controlled by IPL. Due to the nature of shipping, in which a single voyage may include delivery of a supplier's product to a port for unloading to an IPL facility, then also loading product manufactured by IPL for distribution to ports further along the voyage in addition to purchased product, Category 9 emissions are included in Category 4 calculations. Exclusions » Emissions associated with third party road delivery of fertilisers (from ports and IPL distribution facilities to third party distributors and farming customers) have not been included due to unavailability of data. » Emissions associated with storage at third party distributors have not been included due unavailability of data.*

## Scope 3 category 10: Processing of sold products

### (7.5.1) Base year end

*09/30/2020*

### (7.5.2) Base year emissions (metric tons CO2e)

*0.0*

### (7.5.3) Methodological details

*Calculation status Not material. Not calculated. Explanation: IPL primarily manufactures and supplies fertilisers and explosives which are typically consumed during their use by the customer. Exclusions » IPL sells some industrial chemicals which may be used in the manufacture of other products, however data has not been obtained to calculate any emissions which may arise if, and where, this occurs. » IPL sells approximately 27% of its manufactured ammonia for 'industrial use'. This may be used in the manufacture of other products, however data has not been obtained to calculate any emissions which may arise if, and where, this occurs.*

## Scope 3 category 11: Use of sold products

## (7.5.1) Base year end

*09/30/2020*

## (7.5.2) Base year emissions (metric tons CO2e)

*5649000.0*

## (7.5.3) Methodological details

*Calculation boundary: This category includes the calculation of scope 3 emissions associated with the end use of fertilisers, explosives and industrial chemicals sold by IPL, whether the end user is a direct customer or, in the case of some fertilisers, the customer of a third party distributor. This category is a material source of emissions in IPL's value chain.*

*Calculation methodology: The scope 3 emissions associated with customer use of IPL's products are Direct Use-Phase Emissions: products that contain or form greenhouse gases that are emitted during use, as defined in the scope 3 Guidance. Tonnes sold of each product were obtained and a product-specific scope 3 emissions factor was applied (see 'References' below).*

*Data sources: Tonnes sold are sourced from the IPL internal system that tracks IPL's sales. Fertiliser application volumes are estimated by end market and geography, based on IPL sales data.*

*Emissions factor references*
*» GHG Protocol Technical Guidance for Calculating Scope 3 Emissions (v1): Supplement to the Corporate Value Chain (Scope 3) Accounting and Reporting Standard; WRI/WBCSD; 2013; https://ghgprotocol.org/scope-3-technical-calculation-guidance*
*» National Inventory Report 2018, Volume 1; Australian Government Department of Industry, Science, Energy & Resources; 2020; https://www.industry.gov.au/sites/default/files/2020-05/nga-national-inventory-report2018-volume-1.pdf*
*» 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Volume 4: Agriculture, Forestry and Other Land Use, Chapter 11: N2 O Emissions From Managed Soils, and CO2 Emissions From Lime And Urea Application; https://www.ipcc-nggip.iges.or.jp/public/2019rf/pdf/4_Volume4/19R_V4_Ch11_Soils_N2O_CO2.pdf*
*» Gokul Prasad Mathivanan, et al. "New N2o Emission Factors for Crop Residues and Fertiliser Inputs to Agricultural Soils In Germany." Agriculture, ecosystems & environment, v. 322,. pp. 107640. doi: 10.1016/j. agee.2021.107640107640; https://pubag.nal.usda.gov/catalog/7499559*

### Scope 3 category 12: End of life treatment of sold products

#### (7.5.1) Base year end

*09/30/2020*

#### (7.5.2) Base year emissions (metric tons CO2e)

*0.0*

#### (7.5.3) Methodological details

*Calculation status Not relevant. Explanation: IPL manufactures and sells fertilisers and explosives which are typically consumed during their use by the customer.*

### Scope 3 category 13: Downstream leased assets

#### (7.5.1) Base year end

*09/30/2020*

#### (7.5.2) Base year emissions (metric tons CO2e)

*0.0*

#### (7.5.3) Methodological details

*Calculation status Not relevant. Explanation Leasing of downstream assets is not a material part of IPL’s business.*

### Scope 3 category 14: Franchises

#### (7.5.1) Base year end

*09/30/2020*

#### (7.5.2) Base year emissions (metric tons CO2e)

*0.0*

## (7.5.3) Methodological details

*Calculation status Not relevant. Explanation IPL does not have franchised operations.*

## Scope 3 category 15: Investments

## (7.5.1) Base year end

*09/30/2020*

## (7.5.2) Base year emissions (metric tons CO2e)

*110000.0*

## (7.5.3) Methodological details

*Calculation status: Not material. Calculated.*

*Calculation boundary: This category includes the scope 1&2 emissions (on an equity basis) from our assets that are owned as a joint venture but not operated by IPL. The scope 3 Standard categorises this as a downstream category as the provision of capital or financing is framed as a service provided by IPL. Exclusions Only joint ventures engaged in emissions-intensive manufacturing activities have been included in the calculation of emissions from this category.*

*Calculation methodology: The accounting approach for 'equity investments' as described in the scope 3 Guidance is used to calculate these emissions.*

*Data sources: Estimates of scope 1&2 emissions for each investment (which form the basis of scope 3 emissions in IPL's value chain) are sourced from publicly available information, including the most recently available government published data from mandatory or voluntary reporting programs in place in the country, state or region; the most recent reports published by the operating entity e.g. sustainability and annual reports; and other sources if identified through desktop research.*

*Emissions factor references*
*» GHG Protocol Technical Guidance for Calculating Scope 3 Emissions (v1): Supplement to the Corporate Value Chain (Scope 3) Accounting and Reporting Standard; WRI/WBCSD; 2013; [https://ghgprotocol.org/scope-3-technical-calculation-guidance](https://ghgprotocol.org/scope-3-technical-calculation-guidance)*

### Scope 3: Other (upstream)

## (7.5.1) Base year end

*09/30/2020*

## (7.5.2) Base year emissions (metric tons CO2e)

*0.0*

## (7.5.3) Methodological details

*There are no other upstream GHG*

### Scope 3: Other (downstream)

## (7.5.1) Base year end

*09/30/2020*

## (7.5.2) Base year emissions (metric tons CO2e)

*0.0*

## (7.5.3) Methodological details

*There are no other downstream GHG.*

## (7.6) What were your organization’s gross global Scope 1 emissions in metric tons CO2e?

## Reporting year

### (7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

*3,595,407*

### (7.6.3) Methodological details

***Greenhouse Gas Emissions data:*** *Scope 1 and 2 greenhouse gas emissions are calculated based on the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition).*

***Australian Scope 1 and 2 GHG emissions:***

- *Australian Government Clean Energy Regulator (2022) National Greenhouse and Energy Reporting (Measurement) Determination 2008. https://www.cleanenergyregulator.gov.au/NGER/ Legislation/Measurement-Determination*
- *Department of Climate Change, Energy, Environment and Water (2021) National Greenhouse Accounts (NGA) Factors (2021). https://www.dcceew.gov.au/climate-change/publications/ national-greenhouse-accounts-factors-2021*
- *Australian Government Clean Energy Regulator (2022) EERS release 2021–22. https://www.cleanenergyregulator.gov.au/ OSR/EERS/eers-current-release*

***Americas Scope 1 and 2 GHG emissions:***

- *US Electricity: USEPA (2022) eGRID2020 Summary Tables, USEPA eGRID 2020. Retrieved Oct 2022 from https://www.epa.gov/egrid/summary-data*
- *US Fuels: USEPA (2022) Emission Factors for Greenhouse Gas Inventories. Retrieved Oct 2022 from https://www.epa.gov/system/files/documents/2022-04/ ghg_emission_factors_hub.pdf*
- *Canada Fuels: USEPA (2022) Emission Factors for Greenhouse Gas Inventories, Retrieved Oct 2022 from https://www.epa.gov/system/files/documents/2022-04/ ghg_emission_factors_hub.pdf*
- *Canada Electricity: International Energy Agency (2022) Canada. Retrieved Oct 2022 from https://www.iea.org/countries/canada*
- *Mexico Electricity: Institute for Global Environmental Strategies (2022). List of Grid Emission Factors version 11.0. Retrieved Oct 2022 from https://pub.iges.or.jp/pub/iges-list-grid-emission-factors*
- *Chile Electricity: Ministry of Energy, Chile (2022) Emission Factors. Retrieved Oct 2022 from http://energiaabierta.cl/visualizaciones/factor-de-emision-sic-sing*

***European Scope 1 and 2 GHG emissions****:*

- *UK Department for Business, Energy and Industrial Strategy (2022) Greenhouse gas reporting: conversion factors 2022. Retrieved Oct 2022 from https://www.gov.uk/government/publications/ greenhouse-gas-reporting-conversion-factors-2022*

## (7.7) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

### Reporting year

### (7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

*242798*

### (7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

*242798*

### (7.7.4) Methodological details

***Greenhouse Gas Emissions data:*** *Scope 1 and 2 greenhouse gas emissions are calculated based on the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition).*

***Australian Scope 1 and 2 GHG emissions:***

- *Australian Government Clean Energy Regulator (2022) National Greenhouse and Energy Reporting (Measurement) Determination 2008. https://www.cleanenergyregulator.gov.au/NGER/ Legislation/Measurement-Determination*
- *Department of Climate Change, Energy, Environment and Water (2021) National Greenhouse Accounts (NGA) Factors (2021). https://www.dcceew.gov.au/climate-change/publications/ national-greenhouse-accounts-factors-2021*
- *Australian Government Clean Energy Regulator (2022) EERS release 2021–22. https://www.cleanenergyregulator.gov.au/ OSR/EERS/eers-current-release*

***Americas Scope 1 and 2 GHG emissions:***

- *US Electricity: USEPA (2022) eGRID2020 Summary Tables, USEPA eGRID 2020. Retrieved Oct 2022 from https://www.epa.gov/egrid/summary-data*
- *US Fuels: USEPA (2022) Emission Factors for Greenhouse Gas Inventories. Retrieved Oct 2022 from https://www.epa.gov/system/files/documents/2022-04/ ghg_emission_factors_hub.pdf*
- *Canada Fuels: USEPA (2022) Emission Factors for Greenhouse Gas Inventories, Retrieved Oct 2022 from https://www.epa.gov/system/files/documents/2022-04/ ghg_emission_factors_hub.pdf*
- *Canada Electricity: International Energy Agency (2022) Canada. Retrieved Oct 2022 from https://www.iea.org/countries/canada*
- *Mexico Electricity: Institute for Global Environmental Strategies (2022). List of Grid Emission Factors version 11.0. Retrieved Oct 2022 from https://pub.iges.or.jp/pub/iges-list-grid-emission-factors*
- *Chile Electricity: Ministry of Energy, Chile (2022) Emission Factors. Retrieved Oct 2022 from [http://energiaabierta.cl/visualizaciones/factor-de-emision-sic-sing](http://energiaabierta.cl/visualizaciones/factor-de-emision-sic-sing)*

***European Scope 1 and 2 GHG emissions****:*

- *UK Department for Business, Energy and Industrial Strategy (2022) Greenhouse gas reporting: conversion factors 2022. Retrieved Oct 2022 from https://www.gov.uk/government/publications/ greenhouse-gas-reporting-conversion-factors-2022*

### (7.8) Account for your organization’s gross global Scope 3 emissions, disclosing and explaining any exclusions.

#### Purchased goods and services

## (7.8.1) Evaluation status

*Select from:*

☑ Relevant, calculated

## (7.8.2) Emissions in reporting year (metric tons CO2e)

*2916000*

## (7.8.3) Emissions calculation methodology

*Select all that apply*

☑ Average product method

## (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

*0*

## (7.8.5) Please explain

*Calculation boundary: This category covers emissions generated upstream of IPL’s operations associated with the manufacture of purchased fertilisers, explosives and chemical products, from the moment resources are mined, extracted, or grown to make these products, through all processing, manufacturing and transport to the exit at our suppliers’ gates. The manufacture of many of these products, such as ammonia-based fertilisers and explosives, are classified as Emissions Intensive Trade Exposed (EITE) activities under the Australian National Greenhouse and Energy Reporting (NGER) system and are the most material contributors to this category.*

*Exclusions: Only the emissions associated with purchased chemical products (and the proportion of expenditure and volume they represent) are included. Due to the high emissions intensity of these products, these sources are estimated to include the majority of IPL’s scope 3 emissions in this category.*

*Calculation methodology: Total tonnes purchased of each material is extracted from IPL’s internal purchasing system for each financial year period. A scope 3 emissions factor specific to each material was then applied per tonne (see ‘References’ below). Data sources ‘Annual tonnes purchased’ data is extracted from the IPL internal system that tracks all external spend.*

*Emissions factor references*
*» GHG Protocol Technical Guidance for Calculating scope 3 Emissions (v1): Supplement to the Corporate Value Chain scope 3) Accounting and Reporting Standard; WRI/WBCSD; 2013; https://ghgprotocol.org/ scope-3-technical-calculation-guidance*
*» National Greenhouse Accounts Factors: Australian National Greenhouse Accounts, October 2020; Australian Government Department of Industry, Science, Energy and Resources; 2020; https://www.industry.gov.au/sites/default/files/2020-10/national-greenhouse-accountsfactors- 2020.pdf*
*» EcoInvent (licenced database) ecoinvent.org*
*» Wood, S. & Cowie, Annette. (2004). A Review of Greenhouse Gas Emission Factors for Fertiliser Production; https://www.researchgate.net/figure/Greenhouse-Gas-Emission-Factors-for-Phosphate-Fertilisers_ tbl4_235704822*

## Capital goods

### (7.8.1) Evaluation status

☑ Not relevant, explanation provided

### (7.8.5) Please explain

*Based on industry intensity factors applied to IPL's annual capital goods expenditure, emissions from this category are not considered to be material. Specifically, the scope 3 emissions from capital goods are estimated to account for less than 1% of our total Scope 3 emissions. This minimal contribution is due to the nature of our operations, where the majority of our Scope 3 emissions stem from highly GHG intensive purchased goods and services and the use of sold products, particularly fertilisers sold into agricultural markets.*

## Fuel-and-energy-related activities (not included in Scope 1 or 2)

### (7.8.1) Evaluation status

☑ Relevant, calculated

### (7.8.2) Emissions in reporting year (metric tons CO2e)

*731,997*

### (7.8.3) Emissions calculation methodology

☑ Fuel-based method

## (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

*0*

## (7.8.5) Please explain

*Calculation boundary: This category covers emissions arising from the extraction, production and delivery of fuels, including diesel, gasoline, LPG, greases, oils and lubricants, and electricity purchased by the operations over which IPL has operational control. Due to IPL's use of natural gas as both an energy source and a feedstock for hydrogen to make ammonia, the emissions associated with the upstream extraction, processing and pipeline delivery of natural and coal seam gas, including fugitive emissions, are material contributors to this category.*

*Exclusions None.*

*Calculation methodology: Total energy and fuels purchased (volumes) have been multiplied by a scope 3 emission factor specific to each fuel. Data sources For natural gas (GJ) and electricity (kWh) purchased, data is collected from invoices. For all other fuels, 'annual volumes purchased' data is extracted from the IPL internal system that tracks all external spend.*

*Emissions factor references*
*» GHG Protocol Technical Guidance for Calculating scope 3 Emissions (v1): Supplement to the Corporate Value Chain (scope 3) Accounting and Reporting Standard; WRI/WBCSD; 2013; https://ghgprotocol.org/scope-3-technical-calculation-guidance*
*» National Greenhouse Accounts Factors: Australian National Greenhouse Accounts, October 2020; Australian Government Department of Industry, Science, Energy and Resources; 2020; https://www. dcceew.gov.au/sites/default/files/documents/national-greenhouse-accounts-factors-2020.pdf*
*» National Inventory Report 2018, Volume 1; Australian Government Department of Industry, Science, Energy and Resources; 2020; https://www.industry.gov.au/sites/default/files/2020-05/nga-nationalinventory- report-2018-volume-1.pdf*
*» eGRID Summary Tables, Table 1 'Non-baseload output emission rates'. USEPA; https://www.epa.gov/sites/default/files/2021-02/documents/egrid2019_summary_tables.pdf*
*» The Emissions and generation Resource Integrated Data Base eGRID Technical Guide, USEPA; https://www.epa.gov/system/files/documents/2022-01/egrid2020_technical_guide.pdf*
*» BEIS Greenhouse gas reporting: Conversion factors 2021: full set (for advanced users) – revised January 2022, Tab WTT-Fuels; Department for Business, Energy & Industrial Strategy, UK Government. https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2021*

### Upstream transportation and distribution

## (7.8.1) Evaluation status

☑ Relevant, calculated

## (7.8.2) Emissions in reporting year (metric tons CO2e)

*349,000*

## (7.8.3) Emissions calculation methodology

☑ Supplier-specific method

☑ Distance-based method

## (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

*25%*

## (7.8.5) Please explain

*Calculation boundary*
*This category includes the scope 3 emissions associated with the shipping, rail and trucking of our purchased goods from Tier 1 suppliers by third parties. It should be noted that natural gas used as feedstock for the chemical manufacture of ammonia is delivered via pipeline – scope 3 emissions associated with the delivery of this raw material are reported under Category 3.*

*Exclusions None.*

*Calculation methodology For marine cargoes to and around Australia, RightShip – a leading maritime risk management and environmental assessment organisation – provided an accurate scope 3 emissions estimate based on its EN16258:2012 certified methodology. For marine cargoes associated with our subsidiary Quantum Fertilisers, and for road and rail freight, the 'distance-based' method as described in the scope 3 Guidance was used: emissions were calculated by applying the appropriate emissions factor to the 'mass x distance' multiplier for each mode of transport. Data sources Tonnes shipped and transported by road and rail were collected from a range of sources including the IPL internal system that tracks all external spend, internal logistics support software and third party reports from logistics suppliers such as RightShip and several road transport contractors. Activity data from external service providers are converted to net tonne kilometres for rail, road and shipping, and the appropriate emissions factor was applied (see references below).*

*Emissions factor references*
*» RightShip Carbon Accounting; https://www.rightship.com/solutions/shipowner/ghg-rating/*
*» GHG Protocol Technical Guidance for Calculating Scope 3 Emissions (v1): Supplement to the Corporate Value Chain (Scope 3) Accounting and Reporting Standard; WRI/WBCSD; 2013; https://ghgprotocol.org/scope-3-technical-calculation-guidance*
*» BEIS Greenhouse gas reporting: Conversion factors 2021: full set (for advanced users) – revised January 2022, Tab Freighting goods WTT delivery vehs & freight; Department for Business, Energy & Industrial Strategy, UK Government. https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2021*

## Waste generated in operations

### (7.8.1) Evaluation status

☑ Not relevant, calculated

### (7.8.2) Emissions in reporting year (metric tons CO2e)

*5,000*

### (7.8.3) Emissions calculation methodology

☑ Supplier-specific method

☑ Average data method

☑ Waste-type-specific method

### (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

*45%*

### (7.8.5) Please explain

*Calculation boundary: This category includes scope 3 emissions associated with all of the waste generated by the operations over which IPL has operational control.*

*Exclusions None.*

*Calculation methodology: For wastes generated by our Australian sites, the supplier-specific method was used, whereby a national waste contractor supplied waste-specific emissions factors. For wastes in Australia disposed of by other waste contractors, and for sites outside of Australia, the average-data method was used. This involves estimating emissions based on total tonnes waste going to each disposal method (e.g. landfill) multiplied by an average emission factor for each disposal method.*

*Data sources: Annual reports from Australian waste management provider; the internal SAI Global data base used by IPL to collect and manage data associated with monthly site reports on energy use, water use and waste; relevant emissions factors (see references below).*

*Emissions factor references*

*» GHG Protocol Technical Guidance for Calculating Scope 3 Emissions (v1): Supplement to the Corporate Value Chain (Scope 3) Accounting and Reporting Standard; WRI/WBCSD; 2013; [https://ghgprotocol.org/scope-3-technical-calculation-guidance](https://ghgprotocol.org/scope-3-technical-calculation-guidance)*
*» National Greenhouse Accounts Factors: Australian National Greenhouse Accounts, October 2020; Australian Government Department of Industry, Science, Energy and Resources; 2020; [https://www.industry.gov.au/sites/default/files/2020-10/national-greenhouse-accounts-factors-2020.pdf](https://www.industry.gov.au/sites/default/files/2020-10/national-greenhouse-accounts-factors-2020.pdf)*
*» BEIS Greenhouse gas reporting: Conversion factors 2021: full set (for advanced users) – revised January 2022, Tab Waste Disposal; Department for Business, Energy & Industrial Strategy, UK Government. https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2021 » EcoInvent (licenced database) ecoinvent.org*

### Business travel

## (7.8.1) Evaluation status

☑ Not relevant, calculated

## (7.8.2) Emissions in reporting year (metric tons CO2e)

*7,000*

## (7.8.3) Emissions calculation methodology

☑ Other, please specify**:** Peer extrapolation

## (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

*0%*

## (7.8.5) Please explain

*Calculation boundary: This category includes flights and accommodation taken by employees for business-related activities, and travel outside of Australia in vehicles not owned or operated by IPL. Emissions associated with employee travel by hire car within Australia are defined as being under IPL employee operational control under Australian National Greenhouse and Energy Reporting legislation, and are therefore calculated and reported as scope 1 emissions.*

*Calculation methodology Estimate based on peer extrapolation. The methodology for Business Travel was developed by assessing these scope 3 categories from three of IPL's peers. Emissions figures were extracted from sustainability reports and/or CDP reporting. The average was determined for tCO2e/employee for each category across these peers. This was then multiplied by IPL's employee numbers for the relevant years. Data sources Peer Sustainability reports/CDP responses. Emissions factor references No emissions factors were used to derive the GHG in this category. Rather, the total GHG were estimated based on peer extrapolation.*

## Employee commuting

### (7.8.1) Evaluation status

☑ Not relevant, calculated

### (7.8.2) Emissions in reporting year (metric tons CO2e)

*700*

### (7.8.3) Emissions calculation methodology

☑ Other, please specify: Peer extrapolation

### (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

*1%*

### (7.8.5) Please explain

*Calculation methodology Estimate based on peer extrapolation. The methodology for Employee Commuting was developed by assessing these scope 3 categories from three of IPL's peers. Emissions figures were extracted from sustainability reports and/or CDP reporting. The average was determined for tCO2e/employee for each category across these peers. This was then multiplied by IPL's employee numbers for the relevant years.*

*Data sources Peer Sustainability reports/CDP responses.*

*Emissions factor references No emissions factors were used to drive the GHG in this category. Rather, the total GHG were estimated based on peer extrapolation.*

## Upstream leased assets

### (7.8.1) Evaluation status

☑ Not relevant, calculated

### (7.8.2) Emissions in reporting year (metric tons CO2e)

*0.001*

## (7.8.3) Emissions calculation methodology

☑ Average data method

## (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

*0*

## (7.8.5) Please explain

*IPL has very few upstream leased assets. In Australia, where properties are leased and electricity use is included in the lease (rather than invoiced directly to IPL) an estimate of electricity use is made in accordance with the National Greenhouse and Energy Reporting legislation, ensuring that this energy use is included in IPL's scope 2 and scope 3 emissions under category 'Fuel-and-energy-related activities (not included in Scope 1 or 2)'. Based on owned and operated sites similar to our few upstream leased assets, we have estimated that scope 3 emissions from this category are not considered to be material. Specifically, the emissions from upstream leased assets account for less than 0.1% of our total Scope 3 emissions. This minimal contribution is due to a very small number of upstream leased assets and the nature of our operations, where the majority of our scope 3 emissions stem from emissions intensive purchased goods and the use of sold products, particularly customer use of sold fertilisers.*

### Downstream transportation and distribution

## (7.8.1) Evaluation status

☑ Relevant, calculated

## (7.8.2) Emissions in reporting year (metric tons CO2e)

*0*

## (7.8.3) Emissions calculation methodology

☑ Supplier-specific method

☑ Distance-based method

## (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

*25%*

## (7.8.5) Please explain

*Calculation boundary: This category includes emissions associated with the transport of products sold by IPL in vehicles not owned or controlled by IPL.*

*Due to the nature of shipping, in which a single voyage may include delivery of a supplier's product to a port for unloading to an IPL facility, then also loading product manufactured by IPL for distribution to ports further along the voyage in addition to purchased product,* ***Category 9 emissions are included in Category 4 calculations.***

### Processing of sold products

## (7.8.1) Evaluation status

☑ Not relevant, explanation provided

## (7.8.5) Please explain

*IPL primarily manufactures and supplies fertilisers and explosives which are typically consumed during their use by the customer. Based on industry intensity factors applied to IPL's sales of industrial chemicals, scope 3 emissions from this category are not considered to be material. Specifically, the emissions from processing of the small amount of industrial chemicals we sell has been estimated to account for less than 1% of our total Scope 3 emissions. This minimal contribution is due to the nature of our operations, where the majority of our scope 3 emissions stem from purchased GHG intensive goods and the use of sold products, particularly fertilizers used by farming customers.*

### Use of sold products

## (7.8.1) Evaluation status

☑ Relevant, calculated

## (7.8.2) Emissions in reporting year (metric tons CO2e)

*4048003*

## (7.8.3) Emissions calculation methodology

☑ Average product method

## (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

*0*

## (7.8.5) Please explain

*Calculation boundary: This category includes the calculation of scope 3 emissions associated with the end use of fertilisers, explosives and industrial chemicals sold by IPL, whether the end user is a direct customer or, in the case of some fertilisers, the customer of a third party distributor. This category is a material source of emissions in IPL's value chain.*

*Calculation methodology: The scope 3 emissions associated with customer use of IPL's products are Direct Use-Phase Emissions: products that contain or form greenhouse gases that are emitted during use, as defined in the scope 3 Guidance. Tonnes sold of each product were obtained and a product-specific scope 3 emissions factor was applied (see 'References' below).*

*Data sources: Tonnes sold are sourced from the IPL internal system that tracks IPL's sales. Fertiliser application volumes are estimated by end market and geography, based on IPL sales data.*

*Emissions factor references:*
*» GHG Protocol Technical Guidance for Calculating Scope 3 Emissions (v1): Supplement to the Corporate Value Chain (Scope 3) Accounting and Reporting Standard; WRI/WBCSD; 2013; https://ghgprotocol.org/scope-3-technical-calculation-guidance*
*» National Inventory Report 2018, Volume 1; Australian Government Department of Industry, Science, Energy & Resources; 2020; https://www.industry.gov.au/sites/default/files/2020-05/nga-national-inventory-report- 2018-volume-1.pdf*
*» 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Volume 4: Agriculture, Forestry and Other Land Use, Chapter 11: N2O Emissions From Managed Soils, and CO2 Emissions From Lime And Urea Application; https://www.ipcc-nggip.iges.or.jp/public/2019rf/pdf/4_Volume4/19R_V4_Ch11_Soils_N2O_CO2.pdf*
*» Gokul Prasad Mathivanan, et al. "New N2o Emission Factors for Crop Residues and Fertiliser Inputs to Agricultural Soils In Germany." Agriculture, ecosystems & environment, v. 322,. pp. 107640. doi: 10.1016/j. agee.2021.107640107640; https://pubag.nal.usda.gov/catalog/7499559*

### End of life treatment of sold products

## (7.8.1) Evaluation status

☑ Not relevant, explanation provided

## (7.8.5) Please explain

*IPL manufactures and sells fertilisers and explosives which are consumed during their use by the customer (i.e. explosives are detonated, and fertilisers are applied to crops). The only thing remaining after use of our products is woven polypropylene packaging (WPP) associated with about 15% of our fertilisers and bulk explosives not delivered in bulk via trucks or shipping containers. A proportion of these one tonne bags and small packs (fertilisers) are collected from customers for recycling. The GHG from this makes up less than 0.1 percent of our Scope 3 GHG.*

### Downstream leased assets

## (7.8.1) Evaluation status

☑ Not relevant, explanation provided

## (7.8.5) Please explain

*IPL has no downstream leased assets.*

### Franchises

## (7.8.1) Evaluation status

☑ Not relevant, explanation provided

## (7.8.5) Please explain

*IPL does not have franchises*

### Investments

## (7.8.1) Evaluation status

☑ Not relevant, calculated

## (7.8.2) Emissions in reporting year (metric tons CO2e)

*97,000*

## (7.8.3) Emissions calculation methodology

*Select all that apply*

☑ Investment-specific method

## (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

*100*

## (7.8.5) Please explain

*Calculation boundary: This category includes the scope 1&2 emissions (on an equity basis) from our assets that are owned as a joint venture but not operated by IPL. The scope 3 Standard categorises this as a downstream category as the provision of capital or financing is framed as a service provided by IPL.*

*Exclusions: Only joint ventures engaged in emissions-intensive manufacturing activities have been included in the calculation of emissions from this category.*

*Calculation methodology: The accounting approach for 'equity investments' as described in the scope 3 Guidance is used to calculate these emissions. Data sources Estimates of scope 1&2 emissions for each investment (which form the basis of scope 3 emissions in IPL's value chain) are sourced from publicly available information, including the most recently available government published data from mandatory or voluntary reporting programs in place in the country, state or region; the most recent reports published by the operating entity e.g. sustainability and annual reports; and other sources if identified through desktop research.*

*Emissions factor references » GHG Protocol Technical Guidance for Calculating Scope 3 Emissions (v1): Supplement to the Corporate Value Chain (Scope 3) Accounting and Reporting Standard; WRI/WBCSD; 2013; https://ghgprotocol.org/scope-3-technical-calculation-guidance*

### Other (upstream)

## (7.8.1) Evaluation status

☑ Not relevant, explanation provided

## (7.8.5) Please explain

*There are no other upstream GHG*

### Other (downstream)

## (7.8.1) Evaluation status

*Select from:*

☑ Not relevant, explanation provided

## (7.8.5) Please explain

*There are no other downstream GHG*

## (7.9) Indicate the verification/assurance status that applies to your reported emissions.

| | Verification/assurance status |
|---|---|
| Scope 1 | *Select from:*<br>☑ Third-party verification or assurance process in place |
| Scope 2 (location-based or market-based) | *Select from:*<br>☑ Third-party verification or assurance process in place |
| Scope 3 | *Select from:*<br>☑ No third-party verification or assurance |

## (7.9.1) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

### Row 1

## (7.9.1.1) Verification or assurance cycle in place

☑ Annual process

## (7.9.1.2) Status in the current reporting year

☑ Underway but not complete for reporting year – previous statement of process attached

## (7.9.1.3) Type of verification or assurance

☑ Limited assurance

## (7.9.1.4) Attach the statement

*IPL NGER Limited Assurance Opinion _31102023.pdf*

## (7.9.1.5) Page/section reference

*1-3*

## (7.9.1.6) Relevant standard

☑ Australian National GHG emission regulation (NGER)

## (7.9.1.7) Proportion of reported emissions verified (%)

*34%*

### Row 2

## (7.9.1.1) Verification or assurance cycle in place

☑ Annual process

## (7.9.1.2) Status in the current reporting year

☑ Complete

### (7.9.1.3) Type of verification or assurance

☑ Reasonable assurance

### (7.9.1.4) Attach the statement

*Dyno Nobel St Helens Oregon - Compiled RY2023 Verification Report.pdf*

### (7.9.1.5) Page/section reference

*120-122*

### (7.9.1.6) Relevant standard

☑ Other, please specify

### (7.9.1.7) Proportion of reported emissions verified (%)

*6%*

## (7.9.2) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

### Row 1

### (7.9.2.1) Scope 2 approach

☑ Scope 2 location-based

### (7.9.2.2) Verification or assurance cycle in place

☑ Annual process

## (7.9.2.3) Status in the current reporting year

☑ Underway but not complete for reporting year – previous statement of process attached

## (7.9.2.4) Type of verification or assurance

☑ Limited assurance

## (7.9.2.5) Attach the statement

*IPL NGER Limited Assurance Opinion _31102023.pdf*

## (7.9.2.6) Page/ section reference

*1-3*

## (7.9.2.7) Relevant standard

☑ Australian National GHG emission regulation (NGER)

## (7.9.2.8) Proportion of reported emissions verified (%)

*33%*

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

☑ Decreased

### (7.10.1) 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.

#### Change in renewable energy consumption

#### (7.10.1.1) Change in emissions (metric tons CO2e)

*0*

#### (7.10.1.2) Direction of change in emissions

☑ No change

#### (7.10.1.3) Emissions value (percentage)

*0*

#### (7.10.1.4) Please explain calculation

*There has been no significant change in the proportion of renewable energy used since last year.*

#### Other emissions reduction activities

#### (7.10.1.1) Change in emissions (metric tons CO2e)

*0*

#### (7.10.1.2) Direction of change in emissions

☑ No change

#### (7.10.1.3) Emissions value (percentage)

*0*

## (7.10.1.4) Please explain calculation

*There has been no significant change since last year in reductions associated with GHG reduction initiative - however, several major capex projects were progressed during the year and these will significantly reduce GHG beginning in 2024 (next year). These include the Moranbah Tertiary N2O abatement project, with the completion of the installation in March 2024 (after the end of the current IPL FY23 reporting period for this report). This is performing in excess of expectations and will reduce IPL's global GHG by 5-7% annually, and Dyno Nobel's global GHG by 11% against 2020 baselines.*

### Divestment

## (7.10.1.1) Change in emissions (metric tons CO2e)

*0*

## (7.10.1.2) Direction of change in emissions

☑ No change

## (7.10.1.3) Emissions value (percentage)

*0*

## (7.10.1.4) Please explain calculation

*There has been no significant change in GHG emissions since last year related to divestments.*

### Acquisitions

## (7.10.1.1) Change in emissions (metric tons CO2e)

*0*

## (7.10.1.2) Direction of change in emissions

☑ No change

### (7.10.1.3) Emissions value (percentage)

*0*

### (7.10.1.4) Please explain calculation

*There has been no significant change in GHG emissions since last year related to acquisitions.*

**Mergers**

### (7.10.1.1) Change in emissions (metric tons CO2e)

*0*

### (7.10.1.2) Direction of change in emissions

☑ No change

### (7.10.1.3) Emissions value (percentage)

*0*

### (7.10.1.4) Please explain calculation

*There has been no significant change in GHG emissions since last year related to mergers.*

**Change in output**

### (7.10.1.1) Change in emissions (metric tons CO2e)

*690,597*

### (7.10.1.2) Direction of change in emissions

☑ Decreased

## (7.10.1.3) Emissions value (percentage)

*17.8%*

## (7.10.1.4) Please explain calculation

*There has been a decrease in GHG emissions since last year due to a decrease in production. This is primarily due to cessation of natural gas-based manufacturing of ammonia and urea at the Gibson Island site during the year.*

### Change in methodology

## (7.10.1.1) Change in emissions (metric tons CO2e)

*0*

## (7.10.1.2) Direction of change in emissions

☑ Decreased

## (7.10.1.3) Emissions value (percentage)

*0*

## (7.10.1.4) Please explain calculation

*There has been no significant change in GHG emissions since last year related to changes in methodology.*

### Change in boundary

## (7.10.1.1) Change in emissions (metric tons CO2e)

*0*

## (7.10.1.2) Direction of change in emissions

☑ No change

## (7.10.1.3) Emissions value (percentage)

*0*

## (7.10.1.4) Please explain calculation

*There has been no significant change in GHG emissions since last year related to chnages in boundary*

### Change in physical operating conditions

## (7.10.1.1) Change in emissions (metric tons CO2e)

*639,617*

## (7.10.1.2) Direction of change in emissions

☑ Increased

## (7.10.1.3) Emissions value (percentage)

*16.4%*

## (7.10.1.4) Please explain calculation

*There has been an increase in GHG emissions since last year due to an increase in process emissions from our nitric acid plants. Projects to install nitrous oxide abatement at our Moranbah and LOMO plants progressed during the year. Installation was completed at Moranbah in March 2024 (after the end of this reporting period) and will reduce IPL's global operational GHG by 7% and Dyno Nobel's by 11% against 2020 baselines. A similar project is approved for installation at LOMO (Louisiana, Missouri) in 2025. This project is expected to reduce IPL's global GHG by 19% and Dyno Nobel's global operational GHG by 30% against their 2020 baselines. Together, these projects will reduce IPL's global operational GHG by 26% and Dyno Nobels' operational GHG by 41% against their 2020 baselines.*

### Unidentified

## (7.10.1.1) Change in emissions (metric tons CO2e)

*0*

## (7.10.1.2) Direction of change in emissions

☑ No change

## (7.10.1.3) Emissions value (percentage)

*0*

## (7.10.1.4) Please explain calculation

*There has been no significant change in GHG emissions since last year related to unidentified causes.*

### Other

## (7.10.1.1) Change in emissions (metric tons CO2e)

*0*

## (7.10.1.2) Direction of change in emissions

☑ No change

## (7.10.1.3) Emissions value (percentage)

*0*

## (7.10.1.4) Please explain calculation

*There has been no significant change in GHG emissions since last year related to other issues.*

### (7.10.2) Are your emissions performance calculations in 7.10 and 7.10.1 based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

☑ Location-based

### (7.12) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

☑ No

### (7.15) Does your organization break down its Scope 1 emissions by greenhouse gas type?

☑ Yes

### (7.15.1) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used global warming potential (GWP).

#### Row 1

#### (7.15.1.1) Greenhouse gas

☑ $CO_2$

#### (7.15.1.2) Scope 1 emissions (metric tons of $CO_2e$)

*2,640,523*

#### (7.15.1.3) GWP Reference

☑ IPCC Fifth Assessment Report (AR5 – 100 year)

### Row 2

## (7.15.1.1) Greenhouse gas

☑ N2O

## (7.15.1.2) Scope 1 emissions (metric tons of CO2e)

*947,873*

## (7.15.1.3) GWP Reference

☑ IPCC Fifth Assessment Report (AR5 – 100 year)

### Row 3

## (7.15.1.1) Greenhouse gas

☑ CH4

## (7.15.1.2) Scope 1 emissions (metric tons of CO2e)

*5,216*

## (7.15.1.3) GWP Reference

☑ IPCC Fifth Assessment Report (AR5 – 100 year)

### Row 4

## (7.15.1.1) Greenhouse gas

☑ SF6

### (7.15.1.2) Scope 1 emissions (metric tons of CO2e)

*10*

### (7.15.1.3) GWP Reference

☑ IPCC Fifth Assessment Report (AR5 – 100 year)

## (7.16) Break down your total gross global Scope 1 and 2 emissions by country/area.

### Australia

### (7.16.1) Scope 1 emissions (metric tons CO2e)

*1,227,527*

### (7.16.2) Scope 2, location-based (metric tons CO2e)

*80,228*

### (7.16.3) Scope 2, market-based (metric tons CO2e)

*0*

### Canada

### (7.16.1) Scope 1 emissions (metric tons CO2e)

*3,061*

### (7.16.2) Scope 2, location-based (metric tons CO2e)

*610*

### (7.16.3) Scope 2, market-based (metric tons CO2e)

*0*

**Chile**

### (7.16.1) Scope 1 emissions (metric tons CO2e)

*43*

### (7.16.2) Scope 2, location-based (metric tons CO2e)

*86*

### (7.16.3) Scope 2, market-based (metric tons CO2e)

*0*

**France**

### (7.16.1) Scope 1 emissions (metric tons CO2e)

*0.1*

### (7.16.2) Scope 2, location-based (metric tons CO2e)

*1,538*

### (7.16.3) Scope 2, market-based (metric tons CO2e)

*0*

### Mexico

### (7.16.1) Scope 1 emissions (metric tons CO2e)

*28*

### (7.16.2) Scope 2, location-based (metric tons CO2e)

*856*

### (7.16.3) Scope 2, market-based (metric tons CO2e)

*0*

### Turkey

### (7.16.1) Scope 1 emissions (metric tons CO2e)

*319*

### (7.16.2) Scope 2, location-based (metric tons CO2e)

*490*

### (7.16.3) Scope 2, market-based (metric tons CO2e)

*0*

### United States of America

### (7.16.1) Scope 1 emissions (metric tons CO2e)

*2364429*

### (7.16.2) Scope 2, location-based (metric tons CO2e)

*158990*

### (7.16.3) Scope 2, market-based (metric tons CO2e)

*0*

## (7.17) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

*Select all that apply*

☑ By business division

## (7.17.1) Break down your total gross global Scope 1 emissions by business division.

| | Business division | Scope 1 emissions (metric ton CO2e) |
|---|---|---|
| Row 1 | *Incitec Pivot Fertilisers* | *618,494* |
| Row 2 | *Dyno Nobel Asia Pacific (includes European business)* | *609,353* |
| Row 3 | *Dyno Nobel Americas (includes USA, Canada, Mexico and Chile)* | *2,367,560* |

## (7.19) Break down your organization’s total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

## Chemicals production activities

### (7.19.1) Gross Scope 1 emissions, metric tons CO2e

*3,595,407*

## (7.19.3) Comment

*There are no GHG outside of the chemicals sector. They arise from either production of chemicals, distribution and delivery of chemicals or sales of chemicals.*

## (7.20) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

☑ By business division

## (7.20.1) Break down your total gross global Scope 2 emissions by business division.

| | Business division | Scope 2, location-based (metric tons CO2e) | Scope 2, market-based (metric tons CO2e) |
|---|---|---|---|
| Row 1 | *Incitec Pivot Fertilisers* | *77766* | *77766* |
| Row 2 | *Dyno Nobel Asia Pacific (includes European business)* | *4490* | *4490* |
| Row 3 | *Dyno Nobel Americas (includes USA, Canada, Mexico and Chile)* | *160542* | *160542* |

## (7.21) Break down your organization's total gross global Scope 2 emissions by sector production activity in metric tons CO2e.

### Chemicals production activities

## (7.21.1) Scope 2, location-based, metric tons CO2e

*242798*

## (7.21.3) Comment

*There are no GHG outside of the chemicals sector. They arise from either production of chemicals, distribution and delivery of chemicals or sales of chemicals.*

### (7.22) Break down your gross Scope 1 and Scope 2 emissions between your consolidated accounting group and other entities included in your response.

### Consolidated accounting group

### (7.22.1) Scope 1 emissions (metric tons CO2e)

*3,595,407*

### (7.22.2) Scope 2, location-based emissions (metric tons CO2e)

*242,798*

### (7.22.4) Please explain

*Accounting group aligns with our operational control GHG reporting*

### All other entities

### (7.22.1) Scope 1 emissions (metric tons CO2e)

*0*

### (7.22.2) Scope 2, location-based emissions (metric tons CO2e)

*0*

### (7.22.4) Please explain

*We do not include JVs in our consolidated reporting or our operational controlled GHG reporting. GHG associated with JVs is reported in the 'Investments' category of our Scope 3 reporting.*

### (7.23) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

☑ No

### (7.25) Disclose the percentage of your organization's Scope 3, Category 1 emissions by purchased chemical feedstock.

#### Row 1

#### (7.25.1) Purchased feedstock

☑ Natural gas

#### (7.25.2) Percentage of Scope 3, Category 1 tCO2e from purchased feedstock

*14%*

#### (7.25.3) Explain calculation methodology

*IPL uses natural gas (CH4) as both an energy source and a feedstock for hydrogen, which is used to make to make ammonia (NH3). Total natural gas used as feedstock vs energy is obtained from internal plant meters and/or the chemical formulas which govern the amount of hydrogen (and therefore natural gas: CH4) required to make a tonne of ammonia, and is reconciled back to invoiced amounts of natural gas purchased. Amounts of natural gas used for feedstock (in GJ) have been multiplied by the cradle to gate LCA Scope 3 emission factor specific natural gas from the regions it was purchased. These are included in Category 3 'Fuels and energy purchased' but are here described as a percentage of our Category 1 Scope 3 as requested.*

#### Row 2

#### (7.25.1) Purchased feedstock

☑ Ammonia

#### (7.25.2) Percentage of Scope 3, Category 1 tCO2e from purchased feedstock

*4.5%*

## (7.25.3) Explain calculation methodology

*IPL manufactures all of the ammonia it uses to make ammonium phosphate fertilisers, and most of the ammonia it uses to make ammonium nitrate explosives and UAN. However, during 2023 some ammonia was purchased to make AN and UAN. The tonnes purchased to make these products have been multiplied by the cradle to gate LCA Scope 3 emission factor specific to ammonia for the regions it was purchased from. The resulting tCO2e is described here as the percentage of our Category 1 Scope 3 as requested.*

# (7.25.1) Disclose sales of products that are greenhouse gases.

## Carbon dioxide (CO2)

## (7.25.1.1) Sales, metric tons

*146,993*

## (7.25.1.2) Comment

*IPL captures a pure CO2 stream, which arises from the use of natural gas as a feedstock to make hydrogen for ammonia manufacture, at four manufacturing facilities. Some of this CO2 is sold to make melamine, and some is sold for industrial and food industry use. Total sales are reported here.*

## Methane (CH4)

## (7.25.1.1) Sales, metric tons

*0*

## (7.25.1.2) Comment

*IPL does not sell methane*

## Nitrous oxide (N2O)

## (7.25.1.1) Sales, metric tons

*0*

## (7.25.1.2) Comment

*IPL does not sell N2O*

### Hydrofluorocarbons (HFC)

## (7.25.1.1) Sales, metric tons

*0*

## (7.25.1.2) Comment

*IPL does not sell HFCs*

### Perfluorocarbons (PFC)

## (7.25.1.1) Sales, metric tons

*0*

## (7.25.1.2) Comment

*IPL does not sell PFCs*

### Sulphur hexafluoride (SF6)

## (7.25.1.1) Sales, metric tons

*0*

## (7.25.1.2) Comment

*SF6. Our SF6 reported is an estimated leakage rate from sealed switchgear (in which SF6 is used as an insulation gas) that is used in our on-site gas fired electricity generation plants.*

### Nitrogen trifluoride (NF3)

## (7.25.1.1) Sales, metric tons

*0*

## (7.25.1.2) Comment

*IPL does not sell NF3*

## (7.29) What percentage of your total operational spend in the reporting year was on energy?

*Select from:*

☑ More than 5% but less than or equal to 10%

## (7.30) Select which energy-related activities your organization has undertaken.

| | Indicate whether your organization undertook this energy-related activity in the reporting year |
|---|---|
| Consumption of fuel (excluding feedstocks) | *Select from:*<br>☑ Yes |
| Consumption of purchased or acquired electricity | *Select from:*<br>☑ Yes |
| Consumption of purchased or acquired heat | *Select from:*<br>☑ No |
| Consumption of purchased or acquired steam | *Select from:*<br>☑ No |
| Consumption of purchased or acquired cooling | *Select from:*<br>☑ No |
| Generation of electricity, heat, steam, or cooling | *Select from:*<br>☑ Yes |

## (7.30.1) Report your organization’s energy consumption totals (excluding feedstocks) in MWh.

### Consumption of fuel (excluding feedstock)

### (7.30.1.1) Heating value

☑ HHV (higher heating value)

### (7.30.1.2) MWh from renewable sources

*0*

### (7.30.1.3) MWh from non-renewable sources

*4,689,825*

### (7.30.1.4) Total (renewable and non-renewable) MWh

*4,689,825*

### Consumption of purchased or acquired electricity

### (7.30.1.1) Heating value

☑ HHV (higher heating value)

### (7.30.1.2) MWh from renewable sources

*133,796*

### (7.30.1.3) MWh from non-renewable sources

*331,805*

### (7.30.1.4) Total (renewable and non-renewable) MWh

*465,601*

**Consumption of self-generated non-fuel renewable energy**

### (7.30.1.1) Heating value

☑ HHV (higher heating value)

### (7.30.1.2) MWh from renewable sources

*58,784*

### (7.30.1.4) Total (renewable and non-renewable) MWh

*58,784*

**Total energy consumption**

### (7.30.1.1) Heating value

☑ HHV (higher heating value)

### (7.30.1.2) MWh from renewable sources

*192,580*

### (7.30.1.3) MWh from non-renewable sources

*5,021,603*

### (7.30.1.4) Total (renewable and non-renewable) MWh

*5,214,210*

### (7.30.3) Report your organization’s energy consumption totals (excluding feedstocks) for chemical production activities in MWh.

### Consumption of fuel (excluding feedstocks)

#### (7.30.3.1) Heating value

☑ HHV (higher heating value)

#### (7.30.3.2) MWh consumed from renewable sources inside chemical sector boundary

*0*

#### (7.30.3.3) MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)

*4,689,825*

#### (7.30.3.4) MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary

*0*

#### (7.30.3.5) Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary

*4,689,825*

### Consumption of purchased or acquired electricity

#### (7.30.3.1) Heating value

☑ HHV (higher heating value)

### (7.30.3.2) MWh consumed from renewable sources inside chemical sector boundary

*133,796*

### (7.30.3.3) MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)

*331,805*

### (7.30.3.4) MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary

*0*

### (7.30.3.5) Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary

*465,601*

## Consumption of self-generated non-fuel renewable energy

### (7.30.3.1) Heating value

☑ HHV (higher heating value)

### (7.30.3.2) MWh consumed from renewable sources inside chemical sector boundary

*58,784*

### (7.30.3.5) Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary

*0*

**Total energy consumption**

## (7.30.3.1) Heating value

☑ HHV (higher heating value)

## (7.30.3.2) MWh consumed from renewable sources inside chemical sector boundary

*192,580*

## (7.30.3.3) MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)

*5,021,603*

## (7.30.3.4) MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary

*0*

## (7.30.3.5) Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary

*5,214,210*

## (7.30.6) Select the applications of your organization’s consumption of fuel.

| | Indicate whether your organization undertakes this fuel application |
|---|---|
| Consumption of fuel for the generation of electricity | *Select from:*<br>☑ Yes |
| Consumption of fuel for the generation of heat | *Select from:*<br>☑ Yes |
| Consumption of fuel for the generation of steam | *Select from:*<br>☑ No |
| Consumption of fuel for the generation of cooling | *Select from:*<br>☑ No |
| Consumption of fuel for co-generation or tri-generation | *Select from:*<br>☑ No |

## (7.30.7) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

### Sustainable biomass

### (7.30.7.1) Heating value

*Select from:*
☑ Unable to confirm heating value

### (7.30.7.2) Total fuel MWh consumed by the organization

*0*

## (7.30.7.3) MWh fuel consumed for self-generation of electricity

*0*

## (7.30.7.4) MWh fuel consumed for self-generation of heat

*0*

## (7.30.7.8) Comment

*No sustainable biomass was consumed by the organisation.*

### Other biomass

## (7.30.7.1) Heating value

*Select from:*

☑ Unable to confirm heating value

## (7.30.7.2) Total fuel MWh consumed by the organization

*0*

## (7.30.7.3) MWh fuel consumed for self-generation of electricity

*0*

## (7.30.7.4) MWh fuel consumed for self-generation of heat

*0*

## (7.30.7.8) Comment

*No other biomass was consumed by the organisation.*

### Other renewable fuels (e.g. renewable hydrogen)

## (7.30.7.1) Heating value

☑ Unable to confirm heating value

## (7.30.7.2) Total fuel MWh consumed by the organization

*0*

## (7.30.7.3) MWh fuel consumed for self-generation of electricity

*0*

## (7.30.7.4) MWh fuel consumed for self-generation of heat

*0*

## (7.30.7.8) Comment

*No other renewable fuels were consumed by the organisation.*

### Coal

## (7.30.7.1) Heating value

☑ Unable to confirm heating value

## (7.30.7.2) Total fuel MWh consumed by the organization

*0*

## (7.30.7.3) MWh fuel consumed for self-generation of electricity

*0*

### (7.30.7.4) MWh fuel consumed for self-generation of heat

*0*

### (7.30.7.8) Comment

*No coal was consumed by the organisation.*

## Oil

### (7.30.7.1) Heating value

☑ Unable to confirm heating value

### (7.30.7.2) Total fuel MWh consumed by the organization

*0*

### (7.30.7.3) MWh fuel consumed for self-generation of electricity

*0*

### (7.30.7.4) MWh fuel consumed for self-generation of heat

*0*

### (7.30.7.8) Comment

*No oil was consumed by the organisation*

## Gas

### (7.30.7.1) Heating value

☑ HHV

## (7.30.7.2) Total fuel MWh consumed by the organization

*4,587,746*

## (7.30.7.3) MWh fuel consumed for self-generation of electricity

*864,849*

## (7.30.7.4) MWh fuel consumed for self-generation of heat

*3,722,897*

## (7.30.7.8) Comment

*864,849 MWh of natural gas was used to generate electricity at gas fired power plants at our Moranbah and Phosphate Hill sites in Queensland, Australia. The rest of our natural gas for fuel use was to generate heat, with the majority used to drive the chemical conversion of feedstock gas ($CH_4$) to ammonia ($NH_3$) with the N being obtained from the air (75% N). While steam is also generated from some of this heat, it is not possible for IPL to separate, and therefore quantify, the MWh gas used for steam.*

### Other non-renewable fuels (e.g. non-renewable hydrogen)

## (7.30.7.1) Heating value

☑ Unable to confirm heating value

## (7.30.7.2) Total fuel MWh consumed by the organization

*102,079*

## (7.30.7.3) MWh fuel consumed for self-generation of electricity

*0*

## (7.30.7.4) MWh fuel consumed for self-generation of heat

*0*

## (7.30.7.8) Comment

*While IPL made 58,784 MWh of electricity from steam created from the waste heat of burning sulphur to make sulphuric acid at its Mt,Isa Sulphuric Acid Plant we have not calculated the tonnes of sulphur burned in MWh so have entered zero here.*

### Total fuel

## (7.30.7.1) Heating value

☑ HHV

## (7.30.7.2) Total fuel MWh consumed by the organization

*4,689,825*

## (7.30.7.3) MWh fuel consumed for self-generation of electricity

*864,849*

## (7.30.7.4) MWh fuel consumed for self-generation of heat

*3,722,897*

## (7.30.7.8) Comment

*These 'Other non-renewable fuels' include diesel and petrol fuels, and LPG used for heat. While IPL generated 58,784 MWh of electricity from steam created from the waste heat of burning sulphur to make sulphuric acid at its Mt Isa Sulphuric Acid Plant, we have not calculated the tonnes of sulphur burned in MWh so have included no energy value for the sulphur here.*

### (7.30.9) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

#### Electricity

##### (7.30.9.1) Total Gross generation (MWh)

*237,960*

##### (7.30.9.2) Generation that is consumed by the organization (MWh)

*237,960*

##### (7.30.9.3) Gross generation from renewable sources (MWh)

*80*

##### (7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

*80*

#### Heat

##### (7.30.9.1) Total Gross generation (MWh)

*4,689,825*

##### (7.30.9.2) Generation that is consumed by the organization (MWh)

*4,689,825*

##### (7.30.9.3) Gross generation from renewable sources (MWh)

*0*

### (7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

*0*

**Steam**

### (7.30.9.1) Total Gross generation (MWh)

*0*

### (7.30.9.2) Generation that is consumed by the organization (MWh)

*0*

### (7.30.9.3) Gross generation from renewable sources (MWh)

*0*

### (7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

*0*

**Cooling**

### (7.30.9.1) Total Gross generation (MWh)

*0*

### (7.30.9.2) Generation that is consumed by the organization (MWh)

*0*

### (7.30.9.3) Gross generation from renewable sources (MWh)

*0*

### (7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

*0*

### (7.30.11) Provide details on electricity, heat, steam, and cooling your organization has generated and consumed for chemical production activities.

### Electricity

### (7.30.11.1) Total gross generation inside chemicals sector boundary (MWh)

*237,960*

### (7.30.11.2) Generation that is consumed inside chemicals sector boundary (MWh)

*237,960*

### (7.30.11.3) Generation from renewable sources inside chemical sector boundary (MWh)

*80*

### (7.30.11.4) Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh)

*58,784*

### Heat

### (7.30.11.1) Total gross generation inside chemicals sector boundary (MWh)

*4,689,825*

### (7.30.11.2) Generation that is consumed inside chemicals sector boundary (MWh)

*4,689,825*

### (7.30.11.3) Generation from renewable sources inside chemical sector boundary (MWh)

*0*

### (7.30.11.4) Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh)

*0*

**Steam**

### (7.30.11.1) Total gross generation inside chemicals sector boundary (MWh)

*0*

### (7.30.11.2) Generation that is consumed inside chemicals sector boundary (MWh)

*0*

### (7.30.11.3) Generation from renewable sources inside chemical sector boundary (MWh)

*0*

### (7.30.11.4) Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh)

*0*

### Cooling

#### (7.30.11.1) Total gross generation inside chemicals sector boundary (MWh)

*0*

#### (7.30.11.2) Generation that is consumed inside chemicals sector boundary (MWh)

*0*

#### (7.30.11.3) Generation from renewable sources inside chemical sector boundary (MWh)

*0*

#### (7.30.11.4) Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh)

*0*

### (7.30.16) Provide a breakdown by country/area of your electricity/heat/steam/cooling consumption in the reporting year.

### Australia

#### (7.30.16.1) Consumption of purchased electricity (MWh)

*106688*

#### (7.30.16.2) Consumption of self-generated electricity (MWh)

*311937*

#### (7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

*0*

### (7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

*0*

### (7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

*418,625.00*

## Canada

### (7.30.16.1) Consumption of purchased electricity (MWh)

*4,703*

### (7.30.16.2) Consumption of self-generated electricity (MWh)

*0*

### (7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

*0*

### (7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

*0*

### (7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

*4,703.00*

## Chile

### (7.30.16.1) Consumption of purchased electricity (MWh)

*223*

### (7.30.16.2) Consumption of self-generated electricity (MWh)

*0*

### (7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

*0*

### (7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

*0*

### (7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

*223*

**France**

### (7.30.16.1) Consumption of purchased electricity (MWh)

*4,100*

### (7.30.16.2) Consumption of self-generated electricity (MWh)

*0*

### (7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

*0*

### (7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

*0*

### (7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

*4,100*

**Mexico**

## (7.30.16.1) Consumption of purchased electricity (MWh)

*2,023*

## (7.30.16.2) Consumption of self-generated electricity (MWh)

*0*

## (7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

*0*

## (7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

*0*

## (7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

*2,023.00*

**Turkey**

## (7.30.16.1) Consumption of purchased electricity (MWh)

*1,306*

## (7.30.16.2) Consumption of self-generated electricity (MWh)

*0*

## (7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

*0*

### (7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

*0*

### (7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

*1,306.00*

**United States of America**

### (7.30.16.1) Consumption of purchased electricity (MWh)

*346,558*

### (7.30.16.2) Consumption of self-generated electricity (MWh)

*40*

### (7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

*0*

### (7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

*40*

### (7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

*346,638.00*

## (7.31) Does your organization consume fuels as feedstocks for chemical production activities?

☑ Yes

## (7.31.1) Disclose details on your organization’s consumption of feedstocks for chemical production activities.

### Row 1

### (7.31.1.1) Fuels used as feedstocks

☑ Natural gas

### (7.31.1.2) Total consumption

*866,506*

### (7.31.1.3) Total consumption unit

☑ thousand cubic metres

### (7.31.1.4) Inherent carbon dioxide emission factor of feedstock, metric tons CO2 per consumption unit

*1.95*

### (7.31.1.5) Heating value of feedstock, MWh per consumption unit

*0.03*

### (7.31.1.6) Heating value

☑ HHV

### (7.31.1.7) Comment

*In the interests of providing good data, in order to be able to use emissions factors as determined under NGER without conversions, and in order to be able to incorporate the differing range of HHVs, densities and composition of the different natural gas and coal seam natural gas sources used at our different manufacturing plants located across the US and Australia, we request that CDP kindly include the option of 'GJ' for unit selection (rather than volumetric measurements) for natural gas in this question. IPL uses NGER emissions factors for its natural gas globally, which are tCO2e per GJ.*

## (7.31.2) State the percentage, by mass, of primary resource from which your chemical feedstocks derive.

### Oil

**(7.31.2.1) Percentage of total chemical feedstock (%)**

*0*

**(7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year**

☑ No change

### Natural Gas

**(7.31.2.1) Percentage of total chemical feedstock (%)**

*100%*

**(7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year**

☑ No change

### Coal

**(7.31.2.1) Percentage of total chemical feedstock (%)**

*0*

**(7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year**

☑ No change

### Biomass

### (7.31.2.1) Percentage of total chemical feedstock (%)

*0*

### (7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year

☑ No change

### Waste (non-biomass)

### (7.31.2.1) Percentage of total chemical feedstock (%)

*0*

### (7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year

☑ No change

### Fossil fuel (where coal, gas, oil cannot be distinguished)

### (7.31.2.1) Percentage of total chemical feedstock (%)

*0*

### (7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year

☑ No change

### Unknown source or unable to disaggregate

### (7.31.2.1) Percentage of total chemical feedstock (%)

*0*

### (7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year

☑ No change

## (7.39) Provide details on your organization's chemical products.

### Row 1

### (7.39.1) Output product

☑ Ammonia

### (7.39.2) Production (metric tons)

*1,414,929*

### (7.39.3) Capacity (metric tons)

*1,780,000*

### (7.39.4) Direct emissions intensity (metric tons CO2e per metric ton of product)

*1.91*

### (7.39.5) Electricity intensity (MWh per metric ton of product)

*0.454*

### (7.39.6) Steam intensity (MWh per metric ton of product)

*0*

### (7.39.7) Steam/ heat recovered (MWh per metric ton of product)

*0*

### (7.39.8) Comment

*IPL manufactures (rather than purchases) it's ammonia, including ammonia used in ammonium nitrate. Ammonia is an energy intensive product. Although there is a wide use of steam energy within and between plants, we are unable to measure and report this energy recovery at this time. We have therefore entered zero.*

**Row 2**

### (7.39.1) Output product

☑ Nitric acid

### (7.39.2) Production (metric tons)

*845,372*

### (7.39.3) Capacity (metric tons)

*900,000*

### (7.39.4) Direct emissions intensity (metric tons CO2e per metric ton of product)

*1.12*

### (7.39.5) Electricity intensity (MWh per metric ton of product)

*0*

### (7.39.6) Steam intensity (MWh per metric ton of product)

*0*

### (7.39.7) Steam/ heat recovered (MWh per metric ton of product)

*0*

### (7.39.8) Comment

*Our nitric acid plants are net exporters of energy to other manufacturing processes, therefore have zero electricity intensity. Although there is a wide use of steam energy within and between plants, we are unable to measure and report this energy recovery at this time. We have therefore entered zero.*

## (7.45) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

**Row 1**

### (7.45.1) Intensity figure

*0.0006388*

### (7.45.2) Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

*3,838,204*

### (7.45.3) Metric denominator

☑ unit total revenue

### (7.45.4) Metric denominator: Unit total

*6,008,100,000*

### (7.45.5) Scope 2 figure used

☑ Location-based

## (7.45.6) % change from previous year

*3.7*

## (7.45.7) Direction of change

☑ Increased

## (7.45.8) Reasons for change

☑ Change in revenue

## (7.45.9) Please explain

*While IPL's total absolute global emissions declined by 1.3%, its revenue decreased by 5%, which is largely dependent on exchange rates and commodity prices. This indicator is therefore not a good indicator for GHG emissions.*

### Row 2

## (7.45.1) Intensity figure

*660.16958*

## (7.45.2) Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

*3,838,204*

## (7.45.3) Metric denominator

☑ full time equivalent (FTE) employee

## (7.45.4) Metric denominator: Unit total

*5,814*

## (7.45.5) Scope 2 figure used

☑ Location-based

## (7.45.6) % change from previous year

*1.2*

## (7.45.7) Direction of change

☑ Decreased

## (7.45.8) Reasons for change

☑ Other, please specify: Reduction in GHG against previous reporting period

## (7.45.9) Please explain

*While IPL's total absolute global emissions declined by 1.3%, its FTE decreased by only 0.14%.*

### (7.52) Provide any additional climate-related metrics relevant to your business.

### Row 1

## (7.52.1) Description

☑ Other, please specify: Proportion of freshwater withdrawn in regions with high or extremely high baseline water stress

## (7.52.2) Metric value

*0.01*

## (7.52.3) Metric numerator

*456,427*

## (7.52.4) Metric denominator (intensity metric only)

*44,628,998*

## (7.52.5) % change from previous year

*67*

## (7.52.6) Direction of change

☑ Decreased

## (7.52.7) Please explain

*IPL decreased its freshwater withdrawal from areas with high baseline water stress from 2,182,596kL in 2022 to 456,427kL. This was mostly due to the Gibson Island Recycled water project, which connected the site to a source of recycled water. The WRI Aqueduct tool and our climate change scenarios indicate that baseline water stress will increase in this catchment.*

### Row 2

## (7.52.1) Description

☑ Other, please specify**:** Proportion of water withdrawal where water management is considered to be a material issue

## (7.52.2) Metric value

*0.05*

## (7.52.3) Metric numerator

*2,375,625*

## (7.52.4) Metric denominator (intensity metric only)

*44,628,998*

## (7.52.5) % change from previous year

*79%*

## (7.52.6) Direction of change

☑ Decreased

## (7.52.7) Please explain

*IPL decreased its freshwater withdrawal from sites in areas where water has been identified as a a material issue from 12,146,527kL in 2022 to 9,628,361kL. This was mostly due to the Gibson Island Recycled water project, which connected the site to a source of recycled water. The WRI Aqueduct tool and our climate change scenarios indicate that baseline water stress will increase in this catchment.*

### (7.53) Did you have an emissions target that was active in the reporting year?

☑ Absolute target

### (7.53.1) Provide details of your absolute emissions targets and progress made against those targets.

### Row 1

## (7.53.1.1) Target reference number

☑ Abs 1

## (7.53.1.2) Is this a science-based target?

☑ No, but we anticipate setting one in the next two years

## (7.53.1.5) Date target was set

*09/29/2020*

### (7.53.1.6) Target coverage

☑ Organization-wide

### (7.53.1.7) Greenhouse gases covered by target

☑ Carbon dioxide ($CO_2$)
☑ Methane ($CH_4$)
☑ Nitrous oxide ($N_2O$)
☑ Sulphur hexafluoride ($SF_6$)

### (7.53.1.8) Scopes

☑ Scope 1
☑ Scope 2

### (7.53.1.9) Scope 2 accounting method

☑ Location-based

### (7.53.1.11) End date of base year

*09/29/2020*

### (7.53.1.12) Base year Scope 1 emissions covered by target (metric tons CO2e)

*3,646,215*

### (7.53.1.13) Base year Scope 2 emissions covered by target (metric tons CO2e)

*345,181*

### (7.53.1.31) Base year total Scope 3 emissions covered by target (metric tons CO2e)

*0.000*

### (7.53.1.32) Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

*3,991,396.000*

### (7.53.1.33) Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

*100*

### (7.53.1.34) Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

*100*

### (7.53.1.53) Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

*100*

### (7.53.1.54) End date of target

*09/29/2025*

### (7.53.1.55) Targeted reduction from base year (%)

*5*

### (7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

*3,791,826.200*

### (7.53.1.57) Scope 1 emissions in reporting year covered by target (metric tons CO2e)

*3,595,407*

### (7.53.1.58) Scope 2 emissions in reporting year covered by target (metric tons CO2e)

*242798*

### (7.53.1.77) Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

*3,838,205.000*

### (7.53.1.78) Land-related emissions covered by target

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

### (7.53.1.79) % of target achieved relative to base year

*76.76*

### (7.53.1.80) Target status in reporting year

☑ Underway

### (7.53.1.82) Explain target coverage and identify any exclusions

*This target covers IPL's total global Scope 1 and 2 GHG emissions for our current portfolio. There are no exclusions.*

### (7.53.1.83) Target objective

*The objective of our short-term absolute reduction in global scope 1&2 GHG of 5% by 2025 against our 2020 baseline is to reduce our contribution to climate change. Although this global target was set in 2020, our Moranbah Tertiary N2O Abatement Project will also contribute to the management of new regulatory requirements under the Safeguard Mechanism in Australia which were introduced in 2023.*

### (7.53.1.84) Plan for achieving target, and progress made to the end of the reporting year

*This target is supported by emissions reduction projects completed in the years between 2020 and this reporting year, as well as by the installation of Tertiary Nitrous Oxide Abatement on the nitric acid plant at our Moranbah facility in Australia. The Dyno Nobel Moranbah nitric acid plant was built in Queensland in 2012 as part of the Moranbah ammonium nitrate manufacturing facility. The plant was built with secondary abatement installed, which reduces potential N2O emissions by 50-60%, which has abated an estimated 400,000 tCO2e each year for the past nine years. Since these reductions were being achieved well before our 2020 baseline was set, further reductions require technology less commonly applied to nitric acid plants. Such projects are major capital-intensive projects with long lead times.*

*After investigation in 2020-2021, IPL approved the installation of tertiary N2O abatement at Moranbah. Up to 99% of N2O process emissions, which are created during nitric acid manufacture, are removed from the tail gas stream through catalytic conversion to naturally occurring nitrogen and oxygen. Once installed, a further 200,000 tCO2 e will be abated annually at Moranbah. This will equate to a 7% reduction against IPL's 2020 baseline and an 11% reduction for the Dyno Nobel business against its 2020 baseline. During 2023 (this reporting period) A6.3m was invested to progress the project, with installation completed in the first half of 2024, which is after the end of the reporting period for this report. This project will underpin the remaining reductions required to meet, and should in fact, exceed, IPL's 5% by 2025 reduction target.*

## (7.53.1.85) Target derived using a sectoral decarbonization approach

☑ No

### Row 2

## (7.53.1.1) Target reference number

☑ Abs 2

## (7.53.1.2) Is this a science-based target?

☑ No, but we anticipate setting one in the next two years

## (7.53.1.5) Date target was set

*09/29/2021*

## (7.53.1.6) Target coverage

☑ Organization-wide

## (7.53.1.7) Greenhouse gases covered by target

☑ Carbon dioxide (CO2)

☑ Methane (CH4)

☑ Nitrous oxide (N2O)

☑ Sulphur hexafluoride (SF6)

## (7.53.1.8) Scopes

☑ Scope 1
☑ Scope 2

## (7.53.1.9) Scope 2 accounting method

☑ Location-based

## (7.53.1.11) End date of base year

*09/29/2020*

## (7.53.1.12) Base year Scope 1 emissions covered by target (metric tons CO2e)

*3,646,215.0*

## (7.53.1.13) Base year Scope 2 emissions covered by target (metric tons CO2e)

*345,181.0*

## (7.53.1.31) Base year total Scope 3 emissions covered by target (metric tons CO2e)

*0.000*

## (7.53.1.32) Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

*3,991,396.000*

## (7.53.1.33) Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

*100.0*

### (7.53.1.34) Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

*100.0*

### (7.53.1.53) Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

*100.0*

### (7.53.1.54) End date of target

*09/29/2030*

### (7.53.1.55) Targeted reduction from base year (%)

*25*

### (7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

*2,993,547.000*

### (7.53.1.57) Scope 1 emissions in reporting year covered by target (metric tons CO2e)

*3,595,407*

### (7.53.1.58) Scope 2 emissions in reporting year covered by target (metric tons CO2e)

*242,798*

### (7.53.1.77) Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

*3,838,205.000*

### (7.53.1.78) Land-related emissions covered by target

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

### (7.53.1.79) % of target achieved relative to base year

*15.35*

### (7.53.1.80) Target status in reporting year

☑ Underway

### (7.53.1.82) Explain target coverage and identify any exclusions

*This target covers IPL's total global Scope 1 and 2 GHG emissions for our current portfolio. There are no exclusions.*

### (7.53.1.83) Target objective

*The objective of our medium-term absolute reduction in global scope 1&2 GHG of 25% by 2030 against our 2020 baseline is to reduce our contribution to climate change. Although this global target was set in 2020, our Moranbah Tertiary N2O Abatement Project will also contribute to the management of new regulatory requirements under the Safeguard Mechanism in Australia which were introduced in 2023.*

### (7.53.1.84) Plan for achieving target, and progress made to the end of the reporting year

*This target is supported by GHG emissions reduction projects completed in the years between 2020 and this reporting year, as well as by the installation of the Tertiary Nitrous Oxide Abatement Project at the nitric acid plant of our Moranbah facility in Australia, which is described in the previous section on our short-term 5% by 2025 absolute reduction target. IN addition, a similar project will be completed at Dyno Nobel's Louisiana, Missouri (LOMO) AN manufacturing facility. LOMO has the Company's only nitric acid plants without some form of abatement already installed. For this reason, abatement of N2O at LOMO has been under investigation for some time. This project passed through Front End Loading (FEL) stage in 2023 with A2.8m approved by the Board for investment in August 2023. The project has since been fully approved for installation in 2025. Once installed, 500,000 tCO2e will be abated annually at LOMO. This will equate to an 18.5% reduction against IPL's 2020 baseline. As we anticipate a 7% reduction from the Moranbah N2O Abatement Project and will continue to invest in smaller energy efficiency and GHG reduction projects to 2030, this will allow us to meet our 25% by 2030 Target. The LOMO project on its own is expected to result in a 30% reduction for the Dyno Nobel business against its 2020 baseline.*

### (7.53.1.85) Target derived using a sectoral decarbonization approach

☑ No

## Row 4

### (7.53.1.1) Target reference number

☑ Abs 3

### (7.53.1.2) Is this a science-based target?

☑ Yes, we consider this a science-based target, but we have not committed to seek validation of this target by the SBTi within the next two years

### (7.53.1.4) Target ambition

☑ 1.5°C aligned

### (7.53.1.5) Date target was set

*09/29/2021*

### (7.53.1.6) Target coverage

☑ Organization-wide

### (7.53.1.7) Greenhouse gases covered by target

☑ Carbon dioxide (CO2)
☑ Methane (CH4)
☑ Nitrous oxide (N2O)
☑ Sulphur hexafluoride (SF6)

### (7.53.1.8) Scopes

☑ Scope 1
☑ Scope 2

### (7.53.1.9) Scope 2 accounting method

☑ Location-based

### (7.53.1.11) End date of base year

*09/29/2020*

### (7.53.1.12) Base year Scope 1 emissions covered by target (metric tons CO2e)

*3,646,215.0*

### (7.53.1.13) Base year Scope 2 emissions covered by target (metric tons CO2e)

*345,181.0*

### (7.53.1.31) Base year total Scope 3 emissions covered by target (metric tons CO2e)

*0.000*

### (7.53.1.32) Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

*3,991,396.000*

### (7.53.1.33) Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

*100.0*

### (7.53.1.34) Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

*100.0*

### (7.53.1.53) Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

*100.0*

### (7.53.1.54) End date of target

*09/29/2050*

### (7.53.1.55) Targeted reduction from base year (%)

*100*

### (7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

*0.000*

### (7.53.1.57) Scope 1 emissions in reporting year covered by target (metric tons CO2e)

*3,595,407*

### (7.53.1.58) Scope 2 emissions in reporting year covered by target (metric tons CO2e)

*242,798*

### (7.53.1.77) Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

*3,838,205.000*

### (7.53.1.78) Land-related emissions covered by target

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

### (7.53.1.79) % of target achieved relative to base year

*3.84*

### (7.53.1.80) Target status in reporting year

☑ Underway

## (7.53.1.82) Explain target coverage and identify any exclusions

*Our Net Zero by 2050 ambition includes an identified pathway to a 42% absolute reduction in operational GHG by 2030 for our current portfolio which is supported by 4 projects which would provide this 42% reduction by 2030 should they all proceed. It covers IPL's total global Scope 1 and 2 GHG emissions for our current portfolio.*

## (7.53.1.83) Target objective

*The objective of our Net Zero by 2050 ambition and our pathway to a 42% absolute reduction in global scope 1&2 GHG by 2030 against our 2020 baseline is to reduce our contribution to climate change. Depending on the location of the facilities in which the projects are carried out, some projects in the pathway may contribute to the management of new regulatory requirements which were, or may be introduced, after this pathway was identified.*

## (7.53.1.84) Plan for achieving target, and progress made to the end of the reporting year

*IPL has identified a pathway to Net Zero by 2050, including achieving a Paris aligned reduction of 42% in operational GHG by 2030 for our current portfolio based on the implementation of 3 major capital projects. These are the first 3 projects in our Net Zero by 2050 Transition Plan as follows:*

*1. 7% reduction through improved nitrous oxide abatement at our Moranbah site, with the installation of tertiary abatement, which was installed in March 2024 (after the end of the current reporting period).*

*2. 19% reduction through the installation of N2O abatement at our LOMO nitric acid plant, which is our only nitric acid manufacturing site without abatement, with the project approved and begun with installation expected to be completed in 2025.*

*3. 17% reduction through the Gibson Island Green ammonia project, which has completed Front End Engineering Design stage and is awaiting a final investment decision. Remaining identified projects to reach Net Zero operational emissions include:*

*4. Installation of solar power plants and/or connection to renewables grids, such as the Copper String Project in Northern Queensland, to replace our on-site gas fired power plants at Phosphate Hill and Moranbah. 5. Conversion of remaining ammonium phosphate and ammonium nitrate plants from natural gas for ammonia to green hydrogen feedstock for ammonia, as per our Gibson Island Partnership with FFI, and/or purchase of green ammonia for these plants through new project developments, such as our partnership with Keppel Infrastructure at Gladstone in Queensland. 7. Electrification of vehicles 8. The purchase or generation of offsets for the remaining (10%) of GHG that cannot be abated.*

## (7.53.1.85) Target derived using a sectoral decarbonization approach

☑ No

## (7.54) Did you have any other climate-related targets that were active in the reporting year?

☑ No other climate-related targets

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

☑ Yes

## (7.55.1) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

| | Number of initiatives | Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *) |
|---|---|---|
| Under investigation | *6* | |
| To be implemented | *4* | *750,000* |
| Implementation commenced | *3* | *700,000* |
| Implemented | *0* | *0* |
| Not to be implemented | *0* | |

## (7.55.2) Provide details on the initiatives implemented in the reporting year in the table below.

### Row 1

### (7.55.2.1) Initiative category & Initiative type

**Non-energy industrial process emissions reductions**

☑ Other, please specify: Tertiary abatement of nitrous oxide process emissions from nitric acid production

## (7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

*200,000*

## (7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

☑ Scope 1

## (7.55.2.4) Voluntary/Mandatory

☑ Voluntary

## (7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

*0*

## (7.55.2.6) Investment required (unit currency – as specified in C0.4)

*20,000,000*

## (7.55.2.7) Payback period

☑ No payback

## (7.55.2.8) Estimated lifetime of the initiative

☑ >30 years

## (7.55.2.9) Comment

*The Dyno Nobel Moranbah nitric acid plant was built in Queensland in 2012 as part of the Moranbah ammonium nitrate manufacturing facility. The plant was built with secondary abatement installed, which reduces potential N2O emissions by 50-60%, and has abated an estimated 400,000 tCO2e each year for the past nine years. Since these reductions were being achieved well before our 2020 baseline was set, further reductions require technology less commonly applied to nitric acid plants. After investigation in 2021, IPL approved the installation of tertiary N2O abatement at Moranbah. Up to 99% of N2O process emissions, which are created during nitric acid manufacture, are removed from the tail gas stream through catalytic conversion to naturally occurring nitrogen and oxygen. Once installed, a further*

*200,000 tCO2e will be abated annually at Moranbah. This will equate to a 7% reduction against IPL's 2020 baseline and an 11% reduction for the Dyno Nobel business against its 2020 baseline. During 2023, A6.3m was invested to progress the project, with completion of the installation targeted for the first half of 2024. This project will underpin the achievement of IPL's 5% by 2025 reduction target.*

### Row 2

## (7.55.2.1) Initiative category & Initiative type

**Non-energy industrial process emissions reductions**

☑ Other, please specify: Tertiary abatement of nitrous oxide process emissions from nitric acid production

## (7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

*500,000*

## (7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

☑ Scope 1

## (7.55.2.4) Voluntary/Mandatory

☑ Voluntary

## (7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

*0*

## (7.55.2.6) Investment required (unit currency – as specified in C0.4)

*20,000,000*

## (7.55.2.7) Payback period

☑ No payback

## (7.55.2.8) Estimated lifetime of the initiative

☑ >30 years

## (7.55.2.9) Comment

*Dyno Nobel's Louisiana, Missouri (LOMO) AN manufacturing facility has the Company's only nitric acid plant without some form of abatement already installed. For this reason, abatement of N2O at LOMO has been under investigation for some time. In 2021, we installed Continuous Process Emissions Monitoring (CPEM) technology at the plant to improve measurement and allow a more accurate 2020 baseline to be established, with stack testing to further confirm actual emissions.*

*During 2022-23, this testing resulted in confirmation that the measurement is now fully calibrated and a slight restatement of 2020, 2021 and 2022 GHG emissions from this source. This project passed through Front End Loading (FEL) stage in 2023 with A$2.8m invested and was approved by the Board in August 2023 with installation targeted for 2025. Once installed, 500,000 tCO2e will be abated annually at LOMO. This will equate to an 18.5% reduction against IPL's 2020 baseline and a 30% reduction for the Dyno Nobel business against its 2020 baseline.*

### Row 3

## (7.55.2.1) Initiative category & Initiative type

**Low-carbon energy consumption**

☑ Solar PV

## (7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

*342*

## (7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

☑ Scope 2 (location-based)

## (7.55.2.4) Voluntary/Mandatory

☑ Voluntary

## (7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

*369,400*

## (7.55.2.6) Investment required (unit currency – as specified in C0.4)

*1,477,600*

## (7.55.2.7) Payback period

☑ 4-10 years

## (7.55.2.8) Estimated lifetime of the initiative

☑ 21-30 years

## (7.55.2.9) Comment

*Building on the 99kW rooftop solar project installed at our Helidon Initiating Systems (IS) manufacturing site in Australia, Dyno Nobel's Wolf Lake IS manufacturing site was accepted into the 2023 Illinois Shines Block Grant Incentive Program for a 500kW solar project. Construction began in late 2023 with the project expected to reduce up to 50% of purchased electricity and 340 $tCO_2e$ annually.*

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

### Row 1

## (7.55.3.1) Method

☑ Dedicated budget for other emissions reduction activities

## (7.55.3.2) Comment

*The IPL Decarbonisation and Energy Transition Steering Committee is Chaired by the CEO and is responsible for IPL's Net Zero Pathway and the identification and implementation of projects to decarbonise IPL's operations. In 2021, 800,000 was allocated to the DETSC for this purpose. In 2022, the DET Steering Committee established 'Sustainability Capital' within the IPL Capital Allocation Framework. The updated Capital Allocation Framework prioritises 'Sustainability Capital' as part of* *the order 1, or 'first taker' of capital, as shown in the diagram on page 11 of the 2022 IPL Climate Change Report. This capital is allocated to progress a range of major projects required to decarbonise our operations.*

### Row 3

## (7.55.3.1) Method

☑ Employee engagement

## (7.55.3.2) Comment

*Consistent improvement in energy efficiency is a key part of IPL's Manufacturing Excellence process review across our manufacturing business. Manufacturing Excellence involves continuous improvement and engagement of our employees by involving them directly in the implementation of 'best practice' in their own work areas. Employees at all levels of our business are encouraged to think laterally, to share their experiences and ideas, and to participate in implementing improvements, resulting in outcomes which are highly valued by both the business and our employees.*

### Row 4

## (7.55.3.1) Method

☑ Partnering with governments on technology development

## (7.55.3.2) Comment

*Industry and government collaboration on green technologies towards Net Zero' was identified as a material issue for the sustainability of IPL's business in our most recent GRI aligned materiality assessment. IPL has engaged with the Australian Government on its Low Emissions Technology Investment Roadmap through IPL's Decarbonisation and Energy Transition Steering Committee members and partnered with the Australian Renewable Energy Agency (ARENA) to complete the 2.7m Solar Hydrogen Feasibility Study for renewable ammonia production at Moranbah, Queensland in 2020. The Gibson Island Green Ammonia project is a partnership between IPL and Fortescue Future Industries (FFI) to investigate green ammonia production at Incitec Pivot Fertilisers' Gibson Island site. In 2022, the project progressed to FEED stage and secured an AU13.7m ARENA grant. Should the project proceed to a final investment decision, it would be Australia's first industrial scale green ammonia production facility, demonstrating existing infrastructure can be retrofitted to utilise zero-emissions energy sources.IPL continues to engage with the Australian Clean Energy Regulator and the Department of Industry, Science, Energy and Resources (DISER) on a range of issues related to the development of low emissions technologies and the development of Emissions Reduction Fund (ERF) methodologies to incentivise the uptake of new low carbon technologies by our customers. For example, no ERF methodology currently exists to recognise and quantify the GHG reductions associated with EEF (N-inhibited) fertiliser products during their use. IPL continues to engage with a range of industry bodies and directly with DISER to develop such a method.*

### Row 5

### (7.55.3.1) Method

☑ Dedicated budget for low-carbon product R&D

### (7.55.3.2) Comment

*Our fertiliser and explosives manufacturing businesses have dedicated R&D budgets for product development which includes research and development of Enhanced Efficiency Fertilisers (EEFs) which are treated to reduce nitrous oxide (N2O) GHG and reduced energy explosives products and delivery systems.*

### Row 6

### (7.55.3.1) Method

☑ Internal price on carbon

### (7.55.3.2) Comment

*Internal carbon pricing has been included in capital expenditure assessments for projects at our major manufacturing sites in Australia since Australian Carbon Credit Units (ACCUs) were introduced in 2012, with the price reflecting the market price of ACCUs. During 2021, the Board formally approved the application of this carbon price to all future growth capital and investment decisions. We are continuing to embed this into our processes, with the objective of applying the carbon price to all capital projects, consistent with the Capital Allocation Framework, during 2023. The price is currently A$38 and is projected to increase to A$50 by 2026, AU65 by 2030, A$130 by 2040 and A$258 by 2050. A range of carbon prices are also included in our scenario analyses.*

### Row 7

### (7.55.3.1) Method

☑ Financial optimization calculations

### (7.55.3.2) Comment

*Due to the high cost of energy to our business, which includes the use of gas as both an energy source and a feedstock, consistent improvement in energy efficiency not only reduces greenhouse gas emissions, but also delivers costs savings.*

## (7.74) Do you classify any of your existing goods and/or services as low-carbon products?

☑ Yes

## (7.74.1) Provide details of your products and/or services that you classify as low-carbon products.

### Row 1

### (7.74.1.1) Level of aggregation

☑ Product or service

### (7.74.1.2) Taxonomy used to classify product(s) or service(s) as low-carbon

☑ No taxonomy used to classify product(s) or service(s) as low carbon

### (7.74.1.3) Type of product(s) or service(s)

**Road**

☑ Other, please specify: EV Explosives delivery vehicle

### (7.74.1.4) Description of product(s) or service(s)

*As an explosives provider, our employees act as contractors on customer mine sites, loading explosives into boreholes. To do this safely, the components of our products are mixed together as they are loaded into the boreholes using trucks called Multiple Processing Units. During this reporting period (FY23) we built our very first electric MPU, complete with its own solar charging station. Designed last year, the prototype electric (eMPU) chassis was assembled and is designed to carry our DeltaE product. The eMPU has a 350kWh battery onboard, and is recharged using a 650kWh battery charging station which can draw power from solar and wind generation at the customer mine site. Power is optimised by regenerative braking, which uses the onboard motor as a generator as the fully loaded truck descends to the mine and uses the brakes, with just a 45 minute recharge time. Once the explosive product is loaded from truck to boreholes, the truck is lighter and uses less power to return uphill for reloading. After road testing, the eMPU will have the chemical processing unit fitted to the back and will be ready for delivery and use in 2024. As per our other MPUs, the eMPU's explosives delivery function is controlled by our Universal Control System and can automatically collect and display loading data into our Nobel Fire App. We are proud to be delivering our first electric MPU as part of helping our customers to decarbonise their mining operations.*

## (7.74.1.5) Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

☑ No

## (7.74.1.13) Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

*1*

### Row 2

## (7.74.1.1) Level of aggregation

☑ Group of products or services

## (7.74.1.2) Taxonomy used to classify product(s) or service(s) as low-carbon

*:*

☑ Other, please specify **:**Thapa, R., Chatterjee, A., Awale, R., McGranahan, D. & Daigh, A. (2016) Effect of Enhanced Efficiency Fertilizers on Nitrous Oxide Emissions and Crop Yields. Soil Science Society of America Journal. 80. 1121–1134. 10.2136/sssaj2016.06.0179.

## (7.74.1.3) Type of product(s) or service(s)

**Power**

☑ Other, please specify**:** Fertilisers

## (7.74.1.4) Description of product(s) or service(s)

*Enhanced Efficiency Fertilisers (EEFs) are treated to keep nitrogen (N) in stable chemical forms in the soil for longer, reducing volatilisation to N2O during their use phase. E.g., Results from a field trial conducted in a ryegrass pasture system in south–western Victoria show the application of EEF with the inhibitor DMPP reduced N2O emissions by 73 per cent when compared to urea application alone. See the Australian Government Department of Agriculture, Water and the Environment Climate Research Program: Reducing Nitrous Oxide Emissions, p.5 at http://www.naturalresources.sa.gov.au/files/78984243-0fc0-487e-8f64-a35d00d2f3dd/reducing-nitrous-oxide-emissions-gen.pdf. Our EEFs include:*
*1. Green Urea NV products containing urea treated with the urease inhibitor, N-(n-butyl) thiophosphoric triamide (NBPT), which delays hydrolysis of urea into unstable forms;*

*2. Entec, a fertiliser treatment that retains nitrogen in the stable ammonium form for an extended period. Both trials and customer use demonstrate the potential for significant reductions in GHG as well as yield increase (see page 35-42 of the Australian Sugarcane Annual 2016 and Less Nitrogen Lost is More Gain in Cane, also in the Australian Canegrower, Sept 2017).*
*3. eNpower 18:20 contains the nitrification inhibitor DMP in IPF's patented DMP-G formulation. DMP works by inhibiting nitrifying bacteria in the soil to slow down the conversion of ammonium N to nitrate, which is more prone to losses to air as GHG.*

## (7.74.1.5) Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

☑ No

## (7.74.1.13) Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

*1*

## C9. Environmental performance - Water security

### (9.1) Are there any exclusions from your disclosure of water-related data?

☑ Yes

### (9.1.1) Provide details on these exclusions.

### Row 1

### (9.1.1.1) Exclusion

☑ Other, please specify: Small distribution sites and offices across North America

### (9.1.1.2) Description of exclusion

*Small distribution and emulsion manufacturing sites across North America. Offices and other administration buildings across North America*

### (9.1.1.3) Reason for exclusion

☑ Data is not available

### (9.1.1.4) Primary reason why data is not available

☑ Judged to be unimportant or not relevant

### (9.1.1.7) Percentage of water volume the exclusion represents

☑ Less than 1%

### (9.1.1.8) Please explain

*Water use for similar sites in known in Australia and has been used to estimate that water use from similar sites across north America in total would make up ess that 1% of total use compared to the large amounts of cooling water used in manufacturing sites.*

**(9.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?**

**Water withdrawals – total volumes**

### (9.2.1) % of sites/facilities/operations

☑ 76-99

### (9.2.2) Frequency of measurement

☑ Other, please specify: Continuously at large manufacturing sites, monthly at smaller manufacturing sites, quarterly at small offices

### (9.2.3) Method of measurement

*99% of our total water withdrawal volumes are collected via on-site meters at major manufacturing facilities where surface water is extracted from rivers, municipal water invoices, river water meters, groundwater meters, on-site storm water treatment plant meters, and on-site water recycling treatment plant meters where rainfall is captured and treated before use.*

### (9.2.4) Please explain

*IPL collects this data to enable our global water use to be understood, and water intensity factors to be calculated. For our company, 'sites' and/or 'facilities' refers to all of our sites and includes major manufacturing sites (which require large volumes of high-quality fresh water) minor manufacturing sites (which require less water) and distribution and office/admin sites, which require much less water.*

**Water withdrawals – volumes by source**

### (9.2.1) % of sites/facilities/operations

☑ 76-99

### (9.2.2) Frequency of measurement

☑ Other, please specify: Continuously at large manufacturing sites, monthly at smaller manufacturing sites, quarterly at small offices

## (9.2.3) Method of measurement

*99% of our total water withdrawal volumes are collected via municipal water invoices, river water meters, groundwater meters, on-site storm water treatment plant meters, and on-site water recycling treatment plant meters.*

## (9.2.4) Please explain

*Because 99% of our total water withdrawal volumes are collected via municipal water invoices, river water meters, groundwater meters, on-site storm water treatment plant meters, and on-site water recycling treatment plant meters, water by source is also easy to monitor.*

### Water withdrawals quality

## (9.2.1) % of sites/facilities/operations

☑ 51-75

## (9.2.2) Frequency of measurement

☑ Monthly

## (9.2.3) Method of measurement

*EPA Standard Methods conducted by a certified laboratory.*

## (9.2.4) Please explain

*Due to the high quality of water required for non-contact cooling purposes, our St. Helens, Cheyenne, and Waggaman ammonia manufacturing sites all test the surface and groundwater withdrawn for this use on a routine basis. For example, at our Cheyenne site, which uses groundwater, withdrawal quality is tested Monthly, Quarterly, Annually, and every three years by a certified laboratory using US EPA Standard Methods. These sites represent 71% of our total global water withdrawal and 30% of our nitrogen manufacturing sites. Similar sites in Australia treat water before use.*

## Water discharges – total volumes

### (9.2.1) % of sites/facilities/operations

☑ 76-99

### (9.2.2) Frequency of measurement

☑ Continuously

### (9.2.3) Method of measurement

*Water discharge volumes are monitored continuously via internal site meters under EPA licencing at all sites that discharge water.*

### (9.2.4) Please explain

*Water discharge volumes are collected via discharge meters at 100% of IPL sites which discharge. This is typically required, along with regular reporting, by regulators who have granted the associated licence to discharge. In Australia, all sites are 'non-discharge to the environment' sites (with the exception of two sites, in Gibson Island and Geelong, Australia, where storm water passes through treatment before being discharged to surface waters). At these 'non-discharge to the environment' sites, cooling water is recycled multiple times until it evaporates.*

## Water discharges – volumes by destination

### (9.2.1) % of sites/facilities/operations

☑ 76-99

### (9.2.2) Frequency of measurement

☑ Continuously

### (9.2.3) Method of measurement

*Water discharge volumes are monitored continuously via internal meter under EPA licencing at all sites that discharge water.*

### (9.2.4) Please explain

*Water discharge volumes are collected via discharge meters at 100% of IPL sites which discharge. This is typically required, along with regular reporting, by regulators who have granted the associated licence to discharge. In Australia, all sites are 'non-discharge to the environment' sites (with the exception of two sites in Gibson Island and Geelong, Australia, where storm water is captured and treated before being discharged to surface waters). At several of our 'non-discharge to the environment' sites, cooling water is recycled multiple times until it evaporates.*

## Water discharges – volumes by treatment method

### (9.2.1) % of sites/facilities/operations

☑ 76-99

### (9.2.2) Frequency of measurement

☑ Continuously

### (9.2.3) Method of measurement

*Water discharge volumes are monitored continuously via internal meters at each site which discharges.*

### (9.2.4) Please explain

*Since each site has a different treatment method for discharges, we are able to measure volumes by site and therefore treatment method.*

## Water discharge quality – by standard effluent parameters

### (9.2.1) % of sites/facilities/operations

☑ 76-99

### (9.2.2) Frequency of measurement

☑ Quarterly

## (9.2.3) Method of measurement

*Certified laboratory using EPA Standard Methods.*

## (9.2.4) Please explain

*Standard water discharge quality parameters are measured at our major US manufacturing sites which discharge to rivers, with each site following a slightly different regime, as demanded by the licence requirements at each site. Typical parameters include those below: COD (mg/L) BOD (mg/L) TSS (mg/L) NO3-N (mg/L) SO4 (mg/L/day) pH (SU). For example, at our Cheyenne site, discharge is tested quarterly by a certified laboratory using EPA Standard Methods, and the tests include the following: UREA (mg/L) TDS (mg/L) NH3-N (mg/L) NO3-N (mg/L) NO2-N (mg/L) pH (SU) TSS (mg/L) Conductivity (µmoh/cm)*

### Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)

## (9.2.1) % of sites/facilities/operations

☑ 26-50

## (9.2.2) Frequency of measurement

☑ Monthly

## (9.2.3) Method of measurement

*Certified laboratory using EPA Standard Methods.*

## (9.2.4) Please explain

*Additional water quality metrics are included at specific sites for which the risk of nutrients entering the water exists. N, P and K, in particular, are relevant for sites which manufacture ammonium nitrate explosives and fertilisers including urea, ammonium phosphates and single super phosphates. For example, at our Cheyenne, Wyoming ammonium nitrate manufacturing site, discharge is tested quarterly and is conducted by a certified laboratory using EPA Standard Methods, with the following parameters:*
*UREA (mg/L)*
*TDS (mg/L)*
*NH3-N (mg/L)*
*NO3-N (mg/L)*
*NO2-N (mg/L)*

*pH (SU)*
*TSS (mg/L)*
*Conductivity (μmoh/cm)*

*At our Geelong SSP manufacturing site, discharge is monitored continuously for pH and turbidity via the on-site water treatment plant, with additional 'grab samples' tested by a NATA Accredited laboratory as required by EPA licencing.*

### Water discharge quality – temperature

## (9.2.1) % of sites/facilities/operations

☑ 1-25

## (9.2.2) Frequency of measurement

☑ Continuously

## (9.2.3) Method of measurement

*Temperature probe as per EPA Standard Methods, with PM internal program for temperature probe check/calibrations.*

## (9.2.4) Please explain

*Temperature of water discharge is continuously monitored at several sites in the US, and monitored monthly at one additional site, to ensure it remains within licence specifications.*

### Water consumption – total volume

## (9.2.1) % of sites/facilities/operations

☑ 76-99

## (9.2.2) Frequency of measurement

☑ Other, please specify: Continuously at large manufacturing sites, annually at smaller sites and at small offices

## (9.2.3) Method of measurement

*Municipal water invoices, river water meters, groundwater meters, on-site storm water treatment plant meters, and on-site water recycling treatment plant meters.*

## (9.2.4) Please explain

*99% of our total water usage volumes are collected via on-site meters at major manufacturing facilities where surface water is extracted from rivers, municipal water invoices, river water meters, groundwater meters, on-site storm water treatment plant meters, and on-site water recycling treatment plant meters where rainfall is captured and treated before use. Consumption is then calculated by subtracting discharge from withdrawal, which is metered at all sites that discharge.*

### Water recycled/reused

## (9.2.1) % of sites/facilities/operations

☑ 1-25

## (9.2.2) Frequency of measurement

☑ Continuously

## (9.2.3) Method of measurement

*On-site water treatment plant meters*

## (9.2.4) Please explain

*Note: For sites where cooling water is recycled until evaporation, the recycled water is not metered. Only total water use is metered.*

### The provision of fully-functioning, safely managed WASH services to all workers

## (9.2.1) % of sites/facilities/operations

☑ 100%

## (9.2.2) Frequency of measurement

☑ Monthly

## (9.2.3) Method of measurement

*Monthly at smaller manufacturing sites, quarterly at small offices*

## (9.2.4) Please explain

*Amounts sent to WASH facilities are not metered separately, but as part of total withdrawal and are therefore included in total withdrawal as quantified from municipal water invoices, river water meters or groundwater meters, depending on the site. (No purchased recycled or recycled water from on-site water treatment plants is used for WASH services).*

# (9.2.2) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, how do they compare to the previous reporting year, and how are they forecasted to change?

### Total withdrawals

## (9.2.2.1) Volume (megaliters/year)

*44,629*

## (9.2.2.2) Comparison with previous reporting year

☑ Lower

## (9.2.2.3) Primary reason for comparison with previous reporting year

☑ Other, please specify: Inclusion of snowmelt and stormwater at some sites in treated water volumes before discharge

## (9.2.2.4) Five-year forecast

☑ Lower

### (9.2.2.5) Primary reason for forecast

☑ Other, please specify :Reduced production across the Americas and one plant closure at an Australian facility.

### (9.2.2.6) Please explain

*Total withdrawal of water was 8% lower than last year's withdrawal. This was due to lower production across our Americas sites and one plant closure at facility in Australia. During the reporting period, our Gibson Island site ceased the manufacture of ammonia using natural gas. This site uses purchased municipal and recycled water in its cooling towers. This did not affect discharge in the same proportion, as in Australia, cooling water is recycled until evaporation, rather than being discharged after single pass use. This site is under investigation, with Front End Engineering Design stage completed, to convert to the production of ammonia using hydrogen from renewable electricity electrolysis of water, rather than from reforming of natural gas. Should the project proceed, water will be used to make hydrogen, which may mean water withdrawal would be maintained at a similar level.*

## Total discharges

### (9.2.2.1) Volume (megaliters/year)

*26,813*

### (9.2.2.2) Comparison with previous reporting year

☑ Lower

### (9.2.2.3) Primary reason for comparison with previous reporting year

☑ Other, please specify: Inclusion of snowmelt and stormwater at some sites in treated water volumes before discharge

### (9.2.2.4) Five-year forecast

☑ About the same

### (9.2.2.5) Primary reason for forecast

☑ Other, please specify: Similar conditions at sites which treat and discharge single pass cooling water

### (9.2.2.6) Please explain

*Similar conditions at sites which treat and discharge single pass cooling water. At some US sites, snowmelt and storm water is captured and treated before release to ensure the quality of run off. Since these volumes are treated with single pass cooling water in some cases, it is impossible to separate this discharge from cooling water discharge, resulting in year-on-year fluctuations in volume due to year-on-year fluctuations in the amount of precipitation captured and treated.*

## Total consumption

### (9.2.2.1) Volume (megaliters/year)

*17,816*

### (9.2.2.2) Comparison with previous reporting year

☑ Lower

### (9.2.2.3) Primary reason for comparison with previous reporting year

☑ Facility closure

### (9.2.2.4) Five-year forecast

☑ Lower

### (9.2.2.5) Primary reason for forecast

☑ Facility closure

### (9.2.2.6) Please explain

*During the year, natural-gas based manufacturing of ammonia at our Gibson Island facility ceased. This reduced total withdrawal (including the use of purchased recycled water). Large volumes of cooling water were used at this site, which only operated for part of the reporting year. This did not affect discharge, as in Australia, cooling water is recycled until evaporation, rather than being discharged after use. This site is under investigation, with Front End Engineering Design stage completed, to convert to the production of ammonia using hydrogen from renewable electricity electrolysis of water, rather than from reforming of natural gas.The site* *was connected to a recycled water supply in 2021, which will support this future activity should the project proceed, which may mean water usage would be maintained at a similar level.*

## (9.2.4) Indicate whether water is withdrawn from areas with water stress, provide the volume, how it compares with the previous reporting year, and how it is forecasted to change.

### (9.2.4.1) Withdrawals are from areas with water stress

☑ Yes

### (9.2.4.2) Volume withdrawn from areas with water stress (megaliters)

*456.43*

### (9.2.4.3) Comparison with previous reporting year

☑ Much lower

### (9.2.4.4) Primary reason for comparison with previous reporting year

☑ Other, please specify: Connection of manufacturing site to recycled water source

### (9.2.4.5) Five-year forecast

☑ About the same

### (9.2.4.6) Primary reason for forecast

☑ Maximum potential volume reduction already achieved

### (9.2.4.7) % of total withdrawals  that are withdrawn from areas with water stress

*1.02*

## (9.2.4.8) Identification tool

☑ WRI Aqueduct

☑ WWF Water Risk Filter

## (9.2.4.9) Please explain

*The WRI Aqueduct Tool is used annually to assess IPL's water risk because it is the most comprehensive tool available for use and provides projection to 2030 & 2040. The Tool identifies 'Baseline Water Stress' as 'the ratio of total annual water withdrawals to total available annual renewable supply, accounting for upstream consumptive use. Higher values indicate more competition among users.' Using the current reporting year data analysis (as described in W1.2) and the geographic locations of our 22 global major and minor manufacturing sites, the tool identifies no IPL site as 'Extremely high 80%', and no sites as being located in areas identified as higher than 'Low-Medium' in regard to 'Baseline Water Depletion'.*

*During 2023 a TNFD Assessment of our fertiliser business, the WRI Aqueduct Water Risk Atlas was also used to provide data on water stress at locations where IPF operations take place. However, the tool does identify three sites as 'High 40-80%' in relation to water stress.' These three sites are all located in Australia at Geelong (Victoria), Helidon (Queensland) and Gibson Island (Brisbane, Queensland). These three sites withdrew 456.43,513 ML of water in 2023 (compared with 1,513 in 2022 & 2,183 ML in 2021), which is 1% of IPL's total global withdrawal (3.1% in 2022 & 5.2% in 2021). This was calculated from data collected as described in W1.2. The total water withdrawal at these three sites was obtained from invoices.*

*All of these sites draw water from the catchments in which they are located, however the Gibson Island site has been connected to a recycled water source for its manufacturing water. The decreases in 2023 and 2022 are due to this recycled water initiative described in the following paragraph. Two of these three sites do not manufacture ammonia, and therefore do not require large volumes of water. However, the Gibson Island site in Brisbane uses large volumes of cooling water for ammonia manufacture. A4million was invested in a pipeline to connect this site to a recycled municipal water source towards the end of 2021. This project reduced Australian municipal water use by 11% in 2021 and 42% in 2023, against our 2020 baseline.*

*The Geelong site uses recycled storm water via an onsite WTP, which provided 13.3 ML of recycled water for use in the reporting period (IPL FY23).*

### (9.2.7) Provide total water withdrawal data by source.

### Fresh surface water, including rainwater, water from wetlands, rivers, and lakes

## (9.2.7.1) Relevance

☑ Relevant

## (9.2.7.2) Volume (megaliters/year)

*33,923*

## (9.2.7.3) Comparison with previous reporting year

☑ Lower

## (9.2.7.4) Primary reason for comparison with previous reporting year

☑ Increase/decrease in business activity

## (9.2.7.5) Please explain

*Surface water withdrawal decreased by 2% against 2022 withdrawal. This was mostly due to decreased production at our ammonia manufacturing facilities in the US, which use high volumes of single pass non-contact cooling water.*

### Brackish surface water/Seawater

## (9.2.7.1) Relevance

☑ Not relevant

## (9.2.7.5) Please explain

*IPL used no desalinated water in 2023.*

### Groundwater – renewable

## (9.2.7.1) Relevance

☑ Relevant

## (9.2.7.2) Volume (megaliters/year)

*7,750*

## (9.2.7.3) Comparison with previous reporting year

☑ Lower

## (9.2.7.4) Primary reason for comparison with previous reporting year

☑ Increase/decrease in business activity

## (9.2.7.5) Please explain

*Groundwater withdrawal was 14% lower due to decreased production at our Phosphate Hill, St Helens and Cheyenne ammonia manufacturing sites.*

### Groundwater – non-renewable

## (9.2.7.1) Relevance

☑ Not relevant

## (9.2.7.5) Please explain

*IPL does not use non-renewable groundwater*

## Produced/Entrained water

### (9.2.7.1) Relevance

☑ Not relevant

### (9.2.7.5) Please explain

*IPL uses no produced/entrained water*

## Third party sources

### (9.2.7.1) Relevance

☑ Relevant

### (9.2.7.2) Volume (megaliters/year)

*2,858*

### (9.2.7.3) Comparison with previous reporting year

☑ Much lower

### (9.2.7.4) Primary reason for comparison with previous reporting year

☑ Facility closure

### (9.2.7.5) Please explain

*This category includes purchased municipal water (2486ML) and purchased recycled water (372 ML). There was a 40% reduction in 2023 against last year in this category, mostly due to the cessation of natural gas-based manufacturing of ammonia at our Gibson Island site during the year. This is our only large manufacturing site that uses purchased municipal and purchased recycled water in the cooling towers.*

## (9.2.8) Provide total water discharge data by destination.

### Fresh surface water

### (9.2.8.1) Relevance

☑ Relevant

### (9.2.8.2) Volume (megaliters/year)

*26,500*

### (9.2.8.3) Comparison with previous reporting year

☑ Lower

### (9.2.8.4) Primary reason for comparison with previous reporting year

☑ Increase/decrease in business activity

### (9.2.8.5) Please explain

*This year, discharge to surface water was 9.7% lower than in the previous reporting year. This is due to decreased production across most manufacturing sites in the US, where single pass cooling water is returned to the rivers from which it was taken after treatment. ML discharged are sourced from direct measurement by meter.*

*This amount includes discharge of some rainwater/snowmelt where runoff is collected and treated at several sites in North America, and therefore cannot be separately metered. This can affect year-on-year comparisons. Future trends in discharge to surface water are expected to be similar to this year.*

*As in previous years, more than 95% (95.2% this year and 95.7% last year) of our total global discharge was clean, treated non-contact cooling water, which is returned to the rivers from which it was taken after treatment. The remaining portion is deep well injected (see Groundwater below) or sent to third party treatment (see below) facilities.*

## Brackish surface water/seawater

### (9.2.8.1) Relevance

☑ Not relevant

### (9.2.8.5) Please explain

*IPL does not discharge to brackish surface water/seawater.*

## Groundwater

### (9.2.8.1) Relevance

☑ Relevant

### (9.2.8.2) Volume (megaliters/year)

*313*

### (9.2.8.3) Comparison with previous reporting year

☑ About the same

### (9.2.8.4) Primary reason for comparison with previous reporting year

☑ Other, please specify**:** Similar management processes for high nutrient water at our Cheyenne Wyoming site

### (9.2.8.5) Please explain

*ML are sourced from direct measurement by meter. Future trends in discharge to ground water are expected to be very similar.*

### Third-party destinations

## (9.2.8.1) Relevance

☑ Relevant

## (9.2.8.2) Volume (megaliters/year)

*0.24*

## (9.2.8.3) Comparison with previous reporting year

☑ About the same

## (9.2.8.4) Primary reason for comparison with previous reporting year

☑ Other, please specify: Similar management processes

## (9.2.8.5) Please explain

*This destination includes municipal wastewater plants, public or private utilities, which treat the water. There is no use of our discharge water at third party destinations (other than use of the treated water as a recycled water source, which may occur at some utilities).*

### (9.2.9) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

### Tertiary treatment

## (9.2.9.1) Relevance of treatment level to discharge

☑ Relevant

## (9.2.9.2) Volume (megaliters/year)

*328*

## (9.2.9.3) Comparison of treated volume with previous reporting year

☑ Much lower

## (9.2.9.4) Primary reason for comparison with previous reporting year

☑ Other, please specify: Change in rainfall at sites where run off is captured and treated before release to prevent nutrients entering waterways

## (9.2.9.5) % of your sites/facilities/operations this volume applies to

☑ 11-20

## (9.2.9.6) Please explain

*31% less water was treated before release at sites using tertiary treatment. This was due to a decrease in rainfall at the two sites described below. Future volumes are expected to be similar, as the previous year was a high rainfall year due to La Nina.*
*• Due to the incorporation of sewage as a small part of total waste water, and under EPA licensing, the Gibson Island site in Brisbane, Australia uses a tertiary treatment WWTP then a natural wetland settling pond, where most water is evaporated. Due to high nutrients being collected into rainwater on this fertiliser site, rainfall is also captured and treated. Small releases to the river mouth are only made in times of high rainfall when storm water volumes result in the wetland settling pond reaching capacity.*
*• Storm water released from our Geelong site is treated by a Reverse Osmosis WWTP to remove high nutrient levels before release. Most of the treated water is reused, but some is released under EPA licence conditions.*
*• A small amount of groundwater extracted at our St Helens site was treated by a Reverse Osmosis WTP plant before being mixed with clean cooling water which is then returned to the river under EPA licence conditions. (• 80% of our sites are non-discharge to the environment sites.)*

### Secondary treatment

## (9.2.9.1) Relevance of treatment level to discharge

☑ Not relevant

## (9.2.9.6) Please explain

*• Future volumes are expected to remain at zero with no discharged water being treated with secondary treatment as the highest level. Our sites which discharge use primary treatment, or secondary followed by tertiary. (• 80% of our sites are non-discharge to the environment sites.)*

### Primary treatment only

## (9.2.9.1) Relevance of treatment level to discharge

☑ Relevant

## (9.2.9.2) Volume (megaliters/year)

*25,443*

## (9.2.9.3) Comparison of treated volume with previous reporting year

☑ Lower

## (9.2.9.4) Primary reason for comparison with previous reporting year

☑ Increase/decrease in business activity

## (9.2.9.5) % of your sites/facilities/operations this volume applies to

☑ 11-20

## (9.2.9.6) Please explain

*8% less discharge was treated with primary treatment this year than last year, mostly due to lower production and less precipitation/runoff, which is captured for treatment along with cooling water before discharge, and cannot, therefore, be separated.*
*• Future volumes are expected to remain similar.*
*• Primary treatment is used for the majority of our cooling water because the water is of a high quality when withdrawn and is used in as non-contact cooling water, meaning the quality is unaffected during use, with only heat exchange occurring.*
*• At our Louisiana, Missouri facility, river water is filtered then returned to the Mississippi River under EPA licence conditions.*
*• At our St Helens plant, the river water is put through an oil-water separator filter before being returned to the Columbia River under EPA licence conditions.*
*• At our Cheyenne, Wyoming facility groundwater is sand filtered before deep well injection under EPA licence conditions. The quality of the groundwater on extraction is very high (drinking water standard).*
*• 80% of our sites are non-discharge to the environment sites.*

**Discharge to the natural environment without treatment**

### (9.2.9.1) Relevance of treatment level to discharge

☑ Relevant

### (9.2.9.2) Volume (megaliters/year)

*86*

### (9.2.9.3) Comparison of treated volume with previous reporting year

☑ Much lower

### (9.2.9.4) Primary reason for comparison with previous reporting year

☑ Increase/decrease in efficiency

### (9.2.9.5) % of your sites/facilities/operations this volume applies to

☑ Less than 1%

### (9.2.9.6) Please explain

*Our Cheyenne, Wyoming site deep well injects small volumes of high nutrient wastewater under EPA licence.*

**Discharge to a third party without treatment**

### (9.2.9.1) Relevance of treatment level to discharge

☑ Relevant

## (9.2.9.2) Volume (megaliters/year)

*1,042*

## (9.2.9.3) Comparison of treated volume with previous reporting year

☑ Lower

## (9.2.9.4) Primary reason for comparison with previous reporting year

☑ Increase/decrease in business activity

## (9.2.9.5) % of your sites/facilities/operations this volume applies to

*:*

☑ Less than 1%

## (9.2.9.6) Please explain

*Due to reduced production against last year, 8% less discharge was sent to a third party tertiary waste water treatment plant (WWTP) at a neighbouring facility this year than last year, before release. All discharge from our Waggaman, Louisiana site is sent to a neighbouring chemical plant (to which we also pipe captured CO2 for melamine manufacture). This water involves multiple waste streams and is therefore treated by a tertiary WWTP by the chemical company (on-site) before release to the Mississippi River under EPA licence conditions.*

### Other

## (9.2.9.1) Relevance of treatment level to discharge

☑ Not relevant

## (9.2.9.6) Please explain

*100% of our discharge is reported above in other categories. 80% of our sites are 'zero discharge to the environment' sites.*

## (9.2.10) Provide details of your organization’s emissions of nitrates, phosphates, pesticides, and other priority substances to water in the reporting year.

### (9.2.10.1) Emissions to water in the reporting year (metric tons)

*156.7*

### (9.2.10.2) Categories of substances included

☑ Nitrates

☑ Phosphates

☑ Priority substances listed under the EU Water Framework Directive

### (9.2.10.3) List the specific substances included

*155.5 tonnes total nitrogen;*
*0.952 tonnes total phosphorus;*
*0.1153 tonnes nickel;*
*0.0025 tonnes lead;*
*0.0000118 tonnes cadmium and*
*0.0000035 tonnes mercury*
*across our 22 manufacturing sites.*

### (9.2.10.4) Please explain

*As a manufacturer of nitrogen-based explosives and nitrogen and phosphorus -based fertilisers, controlling nutrients in water discharged from sites (including stormwater and cooling water) is a focus for us. Trace amounts of some priority substances listed under the EU Water Framework Directive are also monitored under licence at some sites. The total global amounts of these have been added to arrive at the figures reported here.*

## (9.3) In your direct operations and upstream value chain, what is the number of facilities where you have identified substantive water-related dependencies, impacts, risks, and opportunities?

### Direct operations

### (9.3.1) Identification of facilities in the value chain stage

☑ Yes, we have assessed this value chain stage and identified facilities with water-related dependencies, impacts, risks, and opportunities

### (9.3.2) Total number of facilities identified

*4*

### (9.3.3) % of facilities in direct operations that this represents

*:*
☑ 1-25

### (9.3.4) Please explain

*We have defined 'facility' as a site operated by our businesses. We have not aggregated sites/facilities for reporting purposes. The 4 sites identified here are:*

1. *Our Phosphate Hill ammonium phosphate fertilisers manufacturing site, which is impacted by flooding of the single rail line which moves supplies in, and product out, of the site;*
2. *our Gibson Island site, which is in a catchment subject to water stress which is expected to increase, and which is located within 50kms of ecosystems assessed as being of low integrity, or high biodiversity importance;*
3. *our Geelong SSP fertiliser manufacturing site, which is within 50km of 6 Key Biodiversity Areas, and is in a catchment subject to high baseline water stress which is expected to increase; and*
4. *our Cairns fertiliser distribution site, which is located within 50kms of a high number of threatened species, 6 Key Biodiversity Areas and 76 Protected Areas designated at the national, regional or international level.*

*Globally, our business has 22 manufacturing sites and over 100 distribution sites. These 4 sites were identified through the use of future climate-related scenario analysis, use of the WRI Aqueduct Water Tool and a TNFD LEAP Assessment of our fertiliser business in Australia.*

*Key dependencies exist for the Geelong and Gibson Island sites, which require water for manufacturing. Key impacts were identified for the Phosphate Hill site, which is increasingly impacted by flooding of its rail logistics in the wet season. Risks associated with potential impacts on Key Biodiversity Areas, particularly marine and estuarine systems were identified for the Cairns and Geelong sites.*

### Upstream value chain

## (9.3.1) Identification of facilities in the value chain stage

☑ No, we have not assessed this value chain stage for facilities with water-related dependencies, impacts, risks, and opportunities, but we are planning to do so in the next 2 years

## (9.3.4) Please explain

*We have assessed only one upstream value chain facility in Western Australia (Perdaman) as part of our TNFD LEAP assessment. It was assessed as having no significant water-related dependencies, impacts, risks or opportunities.*

### (9.3.1) For each facility referenced in 9.3, provide coordinates, water accounting data, and a comparison with the previous reporting year.

### Row 1

## (9.3.1.1) Facility reference number

☑ Facility 3

## (9.3.1.2) Facility name (optional)

*Geelong*

## (9.3.1.3) Value chain stage

☑ Direct operations

## (9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

☑ Dependencies

☑ Risks

## (9.3.1.5) Withdrawals or discharges in the reporting year

☑ Yes, withdrawals and discharges

## (9.3.1.7) Country/Area & River basin

**Australia**

☑ Murray - Darling

## (9.3.1.8) Latitude

*38.09*

## (9.3.1.9) Longitude

*144.21*

## (9.3.1.10) Located in area with water stress

☑ Yes

## (9.3.1.13) Total water withdrawals at this facility (megaliters)

*46.84*

## (9.3.1.14) Comparison of total withdrawals with previous reporting year

☑ Much lower

## (9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

*0*

### (9.3.1.16) Withdrawals from brackish surface water/seawater

*0*

### (9.3.1.17) Withdrawals from groundwater - renewable

*0*

### (9.3.1.18) Withdrawals from groundwater - non-renewable

*0*

### (9.3.1.19) Withdrawals from produced/entrained water

*0*

### (9.3.1.20) Withdrawals from third party sources

*46.84*

### (9.3.1.21) Total water discharges at this facility (megaliters)

*229.25*

### (9.3.1.22) Comparison of total discharges with previous reporting year

☑ Much lower

### (9.3.1.23) Discharges to fresh surface water

*229.25*

### (9.3.1.24) Discharges to brackish surface water/seawater

*0*

## (9.3.1.25) Discharges to groundwater

*0*

## (9.3.1.26) Discharges to third party destinations

*0*

## (9.3.1.27) Total water consumption at this facility (megaliters)

*0*

## (9.3.1.28) Comparison of total consumption with previous reporting year

☑ About the same

## (9.3.1.29) Please explain

*Our Geelong SSP manufacturing site is located in the Barwon River Catchment. The catchment and water flows of the Barwon River are generally administered by the Murray–Darling Basin Authority and together with the Darling River, the catchment covers about 13% of the Murray-Darling Basin. Our Geelong site uses purchased Municipal Water. Due to the fertilisers produced on the site, stormwater must be captured and treated under licence to prevent nutrients entering the local waterways. This results in more clean discharge than water withdrawal at the site.*

### Row 2

## (9.3.1.1) Facility reference number

☑ Facility 1

## (9.3.1.2) Facility name (optional)

*Gibson Island*

## (9.3.1.3) Value chain stage

☑ Direct operations

## (9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

☑ Dependencies
☑ Risks
☑ Opportunities

## (9.3.1.5) Withdrawals or discharges in the reporting year

☑ Yes, withdrawals and discharges

## (9.3.1.7) Country/Area & River basin

**Australia**
☑ Other, please specify: North-east Australia

## (9.3.1.8) Latitude

*-27.442*

## (9.3.1.9) Longitude

*153.118*

## (9.3.1.10) Located in area with water stress

☑ Yes

### (9.3.1.13) Total water withdrawals at this facility (megaliters)

*409.58*

### (9.3.1.14) Comparison of total withdrawals with previous reporting year

☑ Much lower

### (9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

*0*

### (9.3.1.16) Withdrawals from brackish surface water/seawater

*0*

### (9.3.1.17) Withdrawals from groundwater - renewable

*0*

### (9.3.1.18) Withdrawals from groundwater - non-renewable

*0*

### (9.3.1.19) Withdrawals from produced/entrained water

*0*

### (9.3.1.20) Withdrawals from third party sources

*409.58*

### (9.3.1.21) Total water discharges at this facility (megaliters)

*11.81*

## (9.3.1.22) Comparison of total discharges with previous reporting year

☑ Lower

## (9.3.1.23) Discharges to fresh surface water

*11.81*

## (9.3.1.24) Discharges to brackish surface water/seawater

*0*

## (9.3.1.25) Discharges to groundwater

*0*

## (9.3.1.26) Discharges to third party destinations

*0*

## (9.3.1.27) Total water consumption at this facility (megaliters)

*0*

## (9.3.1.28) Comparison of total consumption with previous reporting year

☑ About the same

## (9.3.1.29) Please explain

*Our Gibson Island site used large volumes of cooling water during the year to produce ammonia. Due to its location in a water stressed catchment, several water use initiatives are in place at the facility. In 2021 the site was connected to a third party recycled water supply. It used 409.585 ML of purchased municipal water, 371.762 of purchased recycled water, 70.577 of stormwater captured and treated on site, and 149.58 ML of reverse osmosis treated water on the site. These initiatives reduced the Site's withdrawal (municipal water use) by 72% against last year.*

## Row 3

### (9.3.1.1) Facility reference number

☑ Facility 2

### (9.3.1.2) Facility name (optional)

*Phosphate Hill*

### (9.3.1.3) Value chain stage

☑ Direct operations

### (9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

☑ Dependencies

☑ Risks

### (9.3.1.5) Withdrawals or discharges in the reporting year

☑ Yes, withdrawals only

### (9.3.1.6) Reason for no withdrawals and/or discharges

*This site is a non-discharge site under EPA licence. Cooling water is recycled multiple times until evaporation. Process water is reused. dewatering of gypsum stacks is decanted to lined evaporation ponds.*

### (9.3.1.7) Country/Area & River basin

**Australia**

☑ Other, please specify: Georgina Basin, North East Australia

### (9.3.1.8) Latitude

*-21.8814*

### (9.3.1.9) Longitude

*139.9756*

### (9.3.1.10) Located in area with water stress

☑ No

### (9.3.1.13) Total water withdrawals at this facility (megaliters)

*5,261.77*

### (9.3.1.14) Comparison of total withdrawals with previous reporting year

☑ Lower

### (9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

*0*

### (9.3.1.16) Withdrawals from brackish surface water/seawater

*0*

### (9.3.1.17) Withdrawals from groundwater - renewable

*526.77*

### (9.3.1.18) Withdrawals from groundwater - non-renewable

*0*

## (9.3.1.19) Withdrawals from produced/entrained water

*0*

## (9.3.1.20) Withdrawals from third party sources

*0*

## (9.3.1.27) Total water consumption at this facility (megaliters)

*526.77*

## (9.3.1.28) Comparison of total consumption with previous reporting year

☑ Lower

## (9.3.1.29) Please explain

*The remotely located Phosphate Hill ammonium phosphate fertiliser manufacturing site is located near a natural phosphate deposit situated within the Burke River Inlier of the Georgina Basin. The deposit is hosted by the Beetle Creek Formation sequence in a 30 km wide by 100 km long, north-south elongated graben within the southern Mount Isa Block that formed the Duchess Embayment of the Georgina Basin. Groundwater supplies all of the water for the site and the FIFO worker's camp near the site. There was 14% less withdrawal and usage compared to last year. This was mostly due to reduced production. Large volumes of cooling water are used at the site.*

### Row 4

## (9.3.1.1) Facility reference number

☑ Facility 4

## (9.3.1.2) Facility name (optional)

*Cairns*

## (9.3.1.3) Value chain stage

☑ Direct operations

## (9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

☑ Risks

## (9.3.1.5) Withdrawals or discharges in the reporting year

☑ Yes, withdrawals only

## (9.3.1.6) Reason for no withdrawals and/or discharges

*This site is a non-discharge site under EPA licence. The site is a distribution site (no manufacturing)*

## (9.3.1.7) Country/Area & River basin

**Australia**

☑ Other, please specify: Mulgrave River Catchment

## (9.3.1.8) Latitude

*-16.931579*

## (9.3.1.9) Longitude

*145.778333*

## (9.3.1.10) Located in area with water stress

☑ No

## (9.3.1.13) Total water withdrawals at this facility (megaliters)

*0.3*

### (9.3.1.14) Comparison of total withdrawals with previous reporting year

☑ Lower

### (9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

*0*

### (9.3.1.16) Withdrawals from brackish surface water/seawater

*0*

### (9.3.1.17) Withdrawals from groundwater - renewable

*0*

### (9.3.1.18) Withdrawals from groundwater - non-renewable

*0*

### (9.3.1.19) Withdrawals from produced/entrained water

*0*

### (9.3.1.20) Withdrawals from third party sources

*0.3*

### (9.3.1.27) Total water consumption at this facility (megaliters)

*0.3*

### (9.3.1.28) Comparison of total consumption with previous reporting year

☑ Lower

## (9.3.1.29) Please explain

*The Cairns IPF Distribution Centre used 38% less water than last year and is located in the Barron River Basin which has an area of 2189 km2 with Mareeba and Atherton as the main population centres. The basin consists of 29% natural/minimal use lands, 31% grazing, 18% forestry, 8% other crops (including bananas), 3% sugarcane, 3% dairy, 5% urban and 4% other land uses. The Barron River is the most modified river in the Australian Wet Tropics region and is heavily regulated by water supply infrastructure. The basin has a large upper catchment on the Tablelands and a smaller lower catchment north of Cairns where it discharges into Trinity Bay. A major dam is situated at Tinaroo Falls at the northern end of Lake Tinaroo. While the site has no high water dependency, the outlet of the Barron River is to the ocean near the Great Barrier Reef and higher than average Key Biodiversity areas and threatened species are within 50km of the site.*

# (9.3.2) For the facilities in your direct operations referenced in 9.3.1, what proportion of water accounting data has been third party verified?

### Water withdrawals – total volumes

## (9.3.2.1) % verified

☑ Not verified

## (9.3.2.3) Please explain

*IPL does not currently verify water usage and has no plans to do so within the next two years. This is because water usage is not considered to present a material risk to the business or local ecosystems.*

### Water withdrawals – volume by source

## (9.3.2.1) % verified

☑ Not verified

## (9.3.2.3) Please explain

*IPL does not currently verify water usage and has no plans to do so within the next two years. This is because water usage is not considered to present a material risk to the business or local ecosystems.*

### Water withdrawals – quality by standard water quality parameters

## (9.3.2.1) % verified

☑ Not verified

## (9.3.2.3) Please explain

*IPL does not currently verify water usage and has no plans to do so within the next two years. This is because water usage is not considered to present a material risk to the business or local ecosystems.*

### Water discharges – total volumes

## (9.3.2.1) % verified

☑ Not verified

## (9.3.2.3) Please explain

*IPL does not currently verify water usage and has no plans to do so within the next two years. This is because water usage is not considered to present a material risk to the business or local ecosystems.*

### Water discharges – volume by destination

## (9.3.2.1) % verified

☑ Not verified

## (9.3.2.3) Please explain

*IPL does not currently verify water usage and has no plans to do so within the next two years. This is because water usage is not considered to present a material risk to the business or local ecosystems. Note: 80% of our sites are non-discharge to the environment' sites.*

### Water discharges – volume by final treatment level

## (9.3.2.1) % verified

☑ Not verified

## (9.3.2.3) Please explain

*IPL does not currently verify water usage and has no plans to do so within the next two years. This is because water usage is not considered to present a material risk to the business or local ecosystems.*

### Water discharges – quality by standard water quality parameters

## (9.3.2.1) % verified

☑ Not verified

## (9.3.2.3) Please explain

*IPL conducts water testing as described in the relevant section of this report.*

### Water consumption – total volume

## (9.3.2.1) % verified

☑ Not verified

## (9.3.2.3) Please explain

*IPL does not currently verify water usage and has no plans to do so within the next two years. This is because water usage is not considered to present a material risk to the business or local ecosystems.*

## (9.5) Provide a figure for your organization's total water withdrawal efficiency.

| | Revenue (currency) | Total water withdrawal efficiency | Anticipated forward trend |
|---|---|---|---|
| | *6,008,100,000* | *134,623.23* | *About the same.* |

## (9.6) Do you calculate water intensity for your activities in the chemical sector?

☑ Yes

## (9.6.1) For your top five products by production weight/volume, provide the following water intensity information associated with your activities in the chemical sector.

### Row 1

### (9.6.1.1) Product type

**Other chemicals**

☑ Other, please specify: Product manufactured for sale (metric tonnes)

### (9.6.1.2) Product name

*Product manufactured for sale (metric tonnes)*

### (9.6.1.3) Water intensity value (m3/denominator)

*4.87*

### (9.6.1.4) Numerator: water aspect

☑ Freshwater consumption

## (9.6.1.5) Denominator

☑ m3

## (9.6.1.6) Comparison with previous reporting year

☑ Lower

## (9.6.1.7) Please explain

*The numerator of m3 net water use is chosen because it is a better representation of water use impacts than withdrawal, due to the large volumes of single pass cooling water used at our US manufacturing sites which are treated and returned to the rivers from which it was taken. The denominator of 'metric tonnes of product manufactured for sale' is chosen to include all of our products. The net water use intensity per tonne of product manufactured for sale fell by 7% since last year, which we have described as 'lower'. This is a company-wide metric. No weightings were used to arrive at the metric.*

### (9.13) Do any of your products contain substances classified as hazardous by a regulatory authority?

| | Products contain hazardous substances |
|---|---|
| | *Select from:*<br>☑ Yes |

### (9.13.1) What percentage of your company's revenue is associated with products containing substances classified as hazardous by a regulatory authority?

### Row 1

## (9.13.1.1) Regulatory classification of hazardous substances

☑ Annex XVII of EU REACH Regulation

## (9.13.1.2) % of revenue associated with products containing substances in this list

☑ Less than 10%

## (9.13.1.3) Please explain

*IPL has identified only one product which contains a substance of concern as listed on the REACH Substances of Very High Concern (SVHC) List and/or REACH Annex XVII: Restricted Substance List. IPL has developed alternatives to this product and has a strategy to increase sales of the newer products which do not contain this chemical.*

### (9.14) Do you classify any of your current products and/or services as low water impact?

## (9.14.1) Products and/or services classified as low water impact

☑ No, and we do not plan to address this within the next two years

## (9.14.3) Primary reason for not classifying any of your current products and/or services as low water impact

☑ Other, please specify**:** More research is required before such a claim could be verified.

## (9.14.4) Please explain

*We are investing in developing a new class of bio-fertilisers. Organic material has been shown to increase the water holding capacity of soils. However, the products are still under development and we have not conducted trials to verify a direct relationship between these products and soil moisture content. They cannot therefore be classified as having a direct impact on water retention.*

### (9.15) Do you have any water-related targets?

☑ Yes

## (9.15.1) Indicate whether you have targets relating to water pollution, water withdrawals, WASH, or other water-related categories.

### Water pollution

### (9.15.1.1) Target set in this category

☑ No, and we do not plan to within the next two years

### (9.15.1.2) Please explain

*We do not have targets related to water pollution as all of our discharge sites are located in countries in which EPA licencing and strong record of good water management practices mean that discharges are already of a high quality and are regularly monitored. These operations are located in Australia, Canada, and the USA and issues relating to water, including discharge, are managed under the relevant EPA legislation and licencing.*

### Water withdrawals

### (9.15.1.1) Target set in this category

☑ Yes

### Water, Sanitation, and Hygiene (WASH) services

### (9.15.1.1) Target set in this category

☑ No, and we do not plan to within the next two years

### (9.15.1.2) Please explain

*IPL does not currently have a target for WASH services because we already provide these to 100% of our sites and employees. We operate primarily in countries identified by the WRI Aqueduct Tool as having more than 97.5% of the population served with improved water and sanitation. These countries are Australia, Canada, Europe and the USA.*

### Other

## (9.15.1.1) Target set in this category

☑ No, and we do not plan to within the next two years

## (9.15.1.2) Please explain

*IPL does not currently have other water targets because we operate primarily in countries identified by the WRI Aqueduct Tool as having more than 97.5% of the population served with improved water and sanitation. These countries are Australia, Canada, Europe and the USA and issues relating to water, including discharge, are managed under the relevant EPA legislation and licencing.*

### (9.15.2) Provide details of your water-related targets and the progress made.

### Row 1

## (9.15.2.1) Target reference number

☑ Target 1

## (9.15.2.2) Target coverage

☑ Country/area/region

## (9.15.2.3) Category of target & Quantitative metric

**Water withdrawals**

☑ Reduction of water withdrawals from municipal supply or other third party sources

## (9.15.2.4) Date target was set

*09/29/2020*

### (9.15.2.5) End date of base year

*09/29/2020*

### (9.15.2.6) Base year figure

*4,118.84*

### (9.15.2.7) End date of target year

*09/29/2023*

### (9.15.2.8) Target year figure

*3,089.13*

### (9.15.2.9) Reporting year figure

*2,376.64*

### (9.15.2.10) Target status in reporting year

☑ Achieved and maintained

### (9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

☑ None, no alignment after assessment

### (9.15.2.13) Explain target coverage and identify any exclusions

*25% reduction in total Australian municipal water withdrawal by 2023 against a 2020 baseline. This target applied to all of our Australian operations and offices, including all Australian Dyno Nobel and Incitec Pivot Fertilisers sites and offices, with no exclusions.*

### (9.15.2.15) Actions which contributed most to achieving or maintaining this target

*The connection of the Gibson Island site to a recycled water source supported this target and had the greatest contribution to its achievement.*

## (9.15.2.16) Further details of target

*There are no other details to the target.*

# C10. Environmental performance - Plastics

## (10.1) Do you have plastics-related targets, and if so what type?

### (10.1.1) Targets in place

☑ Yes

### (10.1.2) Target type and metric

**End-of-life management**

☑ Other end-of-life management target, please specify: Increase proportion of plastic packaging recycled

### (10.1.3) Please explain

*Our fertilisers business, IPF sells most of its fertilisers in bulk, with 15% sold in one tonne or 25kg WPP bags. IPF was instrumental in setting up the Sugar Cane Fertiliser Bag Recovery Trial in 2015. This developed into the Farm Waste Recovery initiative which became Big Bag Recovery, the Australian Government Accredited Product Stewardship scheme for plastic bags over 15kg/l of contents. As part of this initiative Incitec Pivot Fertilisers has been recycling its one tonne and 25kg fertiliser bags made from woven polypropylene (WPP) in eastern Australia for many years.*

*In Western Australia, our Dyno Nobel explosives business buys and supplies AN in one tonne WPP bags. However, it has been difficult in the past to find recycling options for these. In 2024, we plan to integrate the recycling of our WPP bags into the Big Bag Recovery program through our Port Hedland facility. Inclusion of Dyno Nobel's AN bags into the Big Bag Recovery scheme is expected to allow us to recover and recycle 387 tonnes of waste plastic in 2024, more than doubling our recycled plastics against 2022 volumes. Recycling this packaging waste will also avoid an estimated 580 $tCO_2e$ in GHG and preserve valuable landfill space for our communities.*

## (10.2) Indicate whether your organization engages in the following activities.

### Production/commercialization of plastic polymers (including plastic converters)

### (10.2.1) Activity applies

☑ No

### (10.2.2) Comment

*IPL manufactures and supplies explosives and fertilisers to the mining, quarry and construction, and agricultural markets and does not produce any form of plastic.*

### Production/commercialization of durable plastic goods and/or components (including mixed materials)

### (10.2.1) Activity applies

☑ Yes

### (10.2.2) Comment

*IPL manufactures and supplies explosives and fertilisers to the mining, quarry and construction, and agricultural markets. Our Dyno Nobel business also assembles detonators, which includes the purchase and assembly of plastic components, such as shock tube and det caps, to make its explosives initiating systems.*

### Usage of durable plastics goods and/or components (including mixed materials)

### (10.2.1) Activity applies

☑ No

### (10.2.2) Comment

*IPL manufactures and supplies explosives and fertilisers to the mining, quarry and construction, and agricultural markets and does not use durable plastic good or components.*

### Production/commercialization of plastic packaging

## (10.2.1) Activity applies

☑ No

## (10.2.2) Comment

*IPL manufactures and supplies explosives and fertilisers to the mining, quarry and construction, and agricultural markets and does not produce any plastic packaging.*

### Production/commercialization of goods/products packaged in plastics

## (10.2.1) Activity applies

☑ Yes

## (10.2.2) Comment

*IPL buys and supplies a proportion of its AN and fertilisers in WPP packaging.*

### Provision/commercialization of services that use plastic packaging (e.g., food services)

## (10.2.1) Activity applies

☑ No

## (10.2.2) Comment

*IPL manufactures and supplies explosives and fertilisers to the mining, quarry and construction, and agricultural markets and does not provide services that use plastic packaging (e.g. such as food services)*

### Provision of waste management and/or water management services

## (10.2.1) Activity applies

☑ No

## (10.2.2) Comment

*IPL manufactures and supplies explosives and fertilisers to the mining, quarry and construction, and agricultural markets and does not provide waste or water management services*

### Provision of financial products and/or services for plastics-related activities

## (10.2.1) Activity applies

☑ No

## (10.2.2) Comment

*IPL manufactures and supplies explosives and fertilisers to the mining, quarry and construction, and agricultural markets and does not provide financial products and/or services for plastics-related activities*

### Other activities not specified

## (10.2.1) Activity applies

☑ No

## (10.2.2) Comment

*Other than the collection and recycling of fertiliser WPP bags, there are no other activities not specified relating to plastics.*

## (10.4) Provide the total weight of plastic durable goods and durable components produced, sold and/or used, and indicate the raw material content.

| | Total weight during the reporting year (Metric tons) | Raw material content percentages available to report | Please explain |
|---|---|---|---|
| Durable goods and durable components sold | 5570.22 | ☑ None | *We have reported the total weight of plastic components we assemble into explosives initiating systems for FY23. We will investigate raw material content percentages for future reporting.* |

*[Fixed row]*

## (10.5) Provide the total weight of plastic packaging sold and/or used and indicate the raw material content.

### Plastic packaging used

#### (10.5.1) Total weight during the reporting year (Metric tons)

*21,994*

#### (10.5.2) Raw material content percentages available to report

☑ % virgin fossil-based content

#### (10.5.3) % virgin fossil-based content

*100*

#### (10.5.7) Please explain

*IPL sells most of its explosives and fertiliser products in bulk with no packaging. However, a portion is sold in WPP one tonne and 25kg small packs. The weight of this WPP plastic packaging is reported here. IPL is working with our supplier to secure 30% recycled plastic bags in FY24.*

## (10.5.1) Indicate the circularity potential of the plastic packaging you sold and/or used.

### Plastic packaging used

### (10.5.1.1) Percentages available to report for circularity potential

☑ % technically recyclable

☑ % recyclable in practice and at scale

### (10.5.1.3) % of plastic packaging that is technically recyclable

*100*

### (10.5.1.4) % of plastic packaging that is recyclable in practice at scale

*20*

### (10.5.1.5) Please explain

*WPP plastic packaging is recyclable, and we work with our partner, Big Bag Recovery, to collect our bags from customers for recycling. In FY23, this reporting period, BBR collected and recycled 310 tonnes of our woven polypropylene (WPP) plastic packaging from our farming customers and dealers for recycling. IN 2024, we will extend this recycling to our Dyno Nobel bags. BBR also aims to complete construction of its own recycling plant within the next year to recycle these bags in Australia, rather than overseas. We continue to encourage our farming customers to return the bags through council pick up points or dealers.*

## (10.6) Provide the total weight of waste generated by the plastic you produce, commercialize, use and/or process and indicate the end-of-life management pathways.

### Production of plastic

### (10.6.1) Total weight of waste generated during the reporting year (Metric tons)

*0*

## (10.6.12) Please explain

*IPL did not produce any plastic in the reporting year*

### Commercialization of plastic

## (10.6.1) Total weight of waste generated during the reporting year (Metric tons)

*0*

## (10.6.12) Please explain

*IPL commercialized plastics through the use of plastic components, such as shock tube, in the assembly of its explosives initiating systems (detonators). However, there is no waste created, as these plastics are vaporized in the use phase (that is, in the detonation of the blast). We have therefore not selected recycling or landfill in eth column on 'End of life management', as neither is applicable.*

## C11. Environmental performance - Biodiversity

### (11.2) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

### (11.2.1) Actions taken in the reporting period to progress your biodiversity-related commitments

☑ Yes, we are taking actions to progress our biodiversity-related commitments

### (11.2.2) Type of action taken to progress biodiversity- related commitments

☑ Land/water protection
☑ Education & awareness
☑ Other, please specify: TNFD LEAP Assessment

### (11.3) Does your organization use biodiversity indicators to monitor performance across its activities?

| | Does your organization use indicators to monitor biodiversity performance? |
|---|---|
| | *Select from:*<br>☑ No, we do not use indicators, but plan to within the next two years |

## (11.4) Does your organization have activities located in or near to areas important for biodiversity in the reporting year?

### Legally protected areas

### (11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

☑ Yes

### (11.4.2) Comment

***None of our operations are located in legally protected areas****. However, IPF's Geelong SSP Manufacturing site is within 50 kms of 81 protected areas including Port Phillip Bay and the Bellarine Peninsula, which are both Ramsar Site Wetlands of National Importance. IPF's Cairns operations exist within 50 kms of 76 protected areas – including the World Heritage-listed Great Barrier Reef, the Mandingalbay Yidinji Indigenous Protected Area, the World Heritage-listed Wet Tropics of Queensland, and seven marine parks. It is also within 50 km of two Alliance for Zero Extinction sites – locations identified as the sole area where an Endangered or a Critically Endangered species exists (the Barron River Tributaries and Wooroonooran Key Biodiversity Areas). Although the Cairns operations were assessed as having a relatively low impact on the state of nature, it is located on the edge of extremely important ecosystems. In addition, our Gibson Island Site is located within 50kms of 118 protected areas.*

### UNESCO World Heritage sites

### (11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

☑ Yes

### (11.4.2) Comment

*IPF's Cairns operations exist within 50 kms of 76 protected areas – including the World Heritage-listed Great Barrier Reef, the Mandingalbay Yidinji Indigenous Protected Area, the World Heritage-listed Wet Tropics of Queensland, and seven marine parks. Although the Cairns operations were assessed as having a relatively low impact on the state of nature, it is located on the edge of extremely important ecosystems.*

## UNESCO Man and the Biosphere Reserves

### (11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

☑ No

### (11.4.2) Comment

*No sites were identified as being near UNESCO Man and the Biosphere reserves, of which there are only three in Australia.*

## Ramsar sites

### (11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

☑ Yes

### (11.4.2) Comment

*IPF’s Geelong SSP Manufacturing site is within 50 kms of 81 protected areas including Port Phillip Bay and the Bellarine Peninsula, which are both Ramsar Site Wetlands of National Importance.*

## Key Biodiversity Areas

### (11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

☑ Yes

### (11.4.2) Comment

*IPF’s Geelong SSP Manufacturing site is within 50 kms of six key biodiversity areas. IPF’s Cairns operations also exist within 50 kms of six key biodiversity areas. The Gibson Island Site is located within 50kms of two key biodiversity areas.*

## Other areas important for biodiversity

### (11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

☑ Yes

### (11.4.2) Comment

*IPF’s Geelong SSP Manufacturing site is within 50 kms of six species recognised as Critically Endangered, and a further 31 Endangered Species. In total there are 1,234 threatened species within a 50 km area of our Geelong site. IPF’s Cairns operations exist within 50 kms of two Alliance for Zero Extinction sites – locations identified as the sole area where an Endangered or a Critically Endangered species exists (the Barron River Tributaries and Wooroonooran Key Biodiversity Areas). Our Gibson Island Site is located within 50kms of 2832 threatened species.*

## (11.4.1) Provide details of your organization’s activities in the reporting year located in or near to areas important for biodiversity.

### Row 1

### (11.4.1.2) Types of area important for biodiversity

☑ Legally protected areas

☑ Ramsar sites

☑ Key Biodiversity Areas

### (11.4.1.3) Protected area category (IUCN classification)

☑ Unknown

### (11.4.1.4) Country/area

☑ Australia

## (11.4.1.5) Name of the area important for biodiversity

*Port Phillip Bay and the Bellarine Peninsula, which are both Ramsar Site Wetlands of National Importance*

## (11.4.1.6) Proximity

☑ Up to 50 km

## (11.4.1.8) Briefly describe your organization’s activities in the reporting year located in or near to the selected area

*IPF’s operations at Geelong comprise manufacturing (North Shore), distribution centres (North Shore PDC, Oyster Cove PDC) and port functions on the edge of Victoria’s Port Phillip Bay. These are significant operations, including a Single Super Phosphate manufacturing plant which produces this SSP from the extraction of phosphates from naturally occurring phosphate rich calcium carbonate rock. Around 450,000 tonnes of product are distributed annually from this location, accounting for approximately 22% of tonnage across all IPF sites. IPF’s Geelong manufacturing site makes Single Super Phosphate fertilisers sites exist within 50 kms of: six key biodiversity areas and 81 protected areas – including Port Phillip Bay and the Bellarine Peninsula, which are both Ramsar Site Wetlands of National Importance, and six species which are recognised as Critically Endangered, as well as a further 31 Endangered Species. In total there are 1,234 threatened species within a 50 km area of our site at Geelong.*

## (11.4.1.9) Indicate whether any of your organization’s activities located in or near to the selected area could negatively affect biodiversity

☑ Yes, but mitigation measures have been implemented

## (11.4.1.10) Mitigation measures implemented within the selected area

☑ Physical controls

☑ Operational controls

## (11.4.1.11) Explain how your organization’s activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

*The Geelong operations could potentially impact key biodiversity areas through water use or unintended releases of nutrients or elements from the phosphate rock it uses to make SSP fertilisers, such as phosphates or fluoride, to the environment. IPF has invested in measures to reduce its potential impacts at Geelong. IPF captures, treats and reuses large volumes of nutrient enriched stormwater to reduce nutrients escaping the site through rainfall runoff. In 2023 28,265 kL of water was treated and re-used and the sites NPI reported zero nitrogen and 0.113kg of total phosphorus released to water in the 2023 June year end period. Fluoride emissions* *and dust from rock and fertilisers are reduced through the use of a wet scrubber; dust suppression wind breaks; covering and enclosing of stockpiles, rock sheds and conveyors; enclosing of the product dryer building; and multiple fabric filters/baghouses. An inspection and monitoring program for potential spill or leak sources, along with regular iAuditing activities is also in place. Solid and liquid wastes are collected and sent offsite for disposal and recycling. The Geelong site is located in a region of high baseline water stress as assessed by the WRI Aqueduct Water Tool, which is completed annually as part of IPL's comprehensive risk assessment process. The site relies on purchased municipal water and IPF is already responding to the risk of potential future water shortages at Geelong through the site's capture, treatment and reuse of high nutrient stormwater via its on-site water treatment plant, and the investigation of purchased recycled water. Further water-saving measures have been considered, including the collection of rooftop rainwater, and rainfall prediction models have been used to manage water storage pond levels.*

### Row 2

## (11.4.1.2) Types of area important for biodiversity

☑ Legally protected areas

☑ UNESCO World Heritage sites

☑ Key Biodiversity Areas

☑ Other areas important for biodiversity

## (11.4.1.3) Protected area category (IUCN classification)

☑ Unknown

## (11.4.1.4) Country/area

☑ Australia

## (11.4.1.5) Name of the area important for biodiversity

*the World Heritage-listed Great Barrier Reef, the Mandingalbay Yidinji Indigenous Protected Area, the World Heritage-listed Wet Tropics of Queensland, and seven marine parks. It is also within 50 km of two Alliance for Zero Extinction sites – locations identified as the sole area where an Endangered or a Critically Endangered species exists (the Barron River Tributaries and Wooroonooran Key Biodiversity Areas). In addition, 14 migratory and local species within the 50 km area are considered Crit*

## (11.4.1.6) Proximity

☑ Up to 50 km

## (11.4.1.8) Briefly describe your organization’s activities in the reporting year located in or near to the selected area

*IPF’s operations at Cairns comprise product distribution and port functions on the edge of Trinity Inlet in Cairns. Approximately 50,000 tonnes of fertiliser product are distributed annually from this location, accounting for approximately 2.5% of tonnage across all IPF sites. Product is distributed by bulk into trucks with blending and bagging of some fertilisers also occurring at the site. IPF’s Cairns operations exist within 50 kms of six key biodiversity areas and 76 protected areas – including the World Heritage-listed Great Barrier Reef, the Mandingalbay Yidinji Indigenous Protected Area, the World Heritage-listed Wet Tropics of Queensland, and seven marine parks. It is also within 50 km of two Alliance for Zero Extinction sites – locations identified as the sole area where an Endangered or a Critically Endangered species exists (the Barron River Tributaries and Wooroonooran Key Biodiversity Areas). In addition, 14 migratory and local species within the 50 km area are considered Critically Endangered, and a further 49 are recognised as Endangered Species. In total there are 4,155 threatened species within a 50 km area of this site.*

## (11.4.1.9) Indicate whether any of your organization’s activities located in or near to the selected area could negatively affect biodiversity

☑ Yes, but mitigation measures have been implemented

## (11.4.1.10) Mitigation measures implemented within the selected area

☑ Physical controls

☑ Operational controls

## (11.4.1.11) Explain how your organization’s activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

*IPF’s Cairns operations were assessed as having a relatively low impact on the state of nature in our TNFD LEAP assessment. The main potential risk of impact would be an accidental spill of fertiliser product to waterways, or a spill to land with escape of nutrients to waterways through a coinciding rainfall event. In 2023, operations at Cairns used 300 kL of municipal water. This constitutes a low to moderate pressure on water supply.*

*Although much smaller in scale than IPF’s Geelong operations, Cairns’ immediate proximity to a uniquely high concentration of important ecosystems requires close attention to potential impacts on these, and therefore on the shared human dependencies on environmental assets and ecosystem services. IPF’s Cairns site employs a sophisticated system to manage nutrient-rich water created during equipment washing and in high-volume rain events, recognising that weather extremes that can take place in the local climate. This high-nutrient water can be on-sold as a resource under Queensland’s End of Waste regulations.*

*We also ensure that the risk of spills is managed via our HSEC Management System which includes 18 global HSEC standards, aligned to ISO 14001, OHSAS 18001, ISO 31000 and AS 4801 international standards as well as the American Chemistry Council Responsible Care Management System and Center for Chemical Process Safety. To monitor our environmental performance and continuously improve, we use a global reporting system, Cintellate. By recording and investigating* *incidents, hazards and near misses to establish root causes, we gain insights through this system into the hazards at specific sites and take action based on what we have learned across all sites. A risk register template is included in Cintellate, which supports a uniform approach to risk ranking, management and reporting, including risks to the environment. The risks and controls described here also apply to our Gibson Island site and to several smaller distribution centres located near a range of ecosystems.*

## C13. Further information & sign off

### (13.1) Indicate if any environmental information included in your CDP response (not already reported in 7.9.1/2/3, 8.9.1/2/3/4, and 9.3.2) is verified and/or assured by a third party?

**(13.1.1) Other environmental information included in your CDP response is verified and/or assured by a third party**

☑ No, but we plan to obtain third-party verification/assurance of other environmental information in our CDP response within the next two years

**(13.1.2) Primary reason why other environmental information included in your CDP response is not verified and/or assured by a third party**

☑ Other, please specify: Lack of auditable internal systems

**(13.1.3) Explain why other environmental information included in your CDP response is not verified and/or assured by a third party**

*IPL does not have internal data tracking systems in place to audit some information. However, we are working to improve our systems in 2025-2025, including the onboarding of a new energy, water, waste and GHG data management system, which will support third party verification of 100% of global scope 1,2 and 3 GHG as well as energy, water and waste.*

### (13.3) Provide the following information for the person that has signed off (approved) your CDP response.

**(13.3.1) Job title**

*Chief Strategy and Sustainability Officer*

**(13.3.2) Corresponding job category**

☑ Chief Sustainability Officer (CSO)