



Our Fertilisers Business

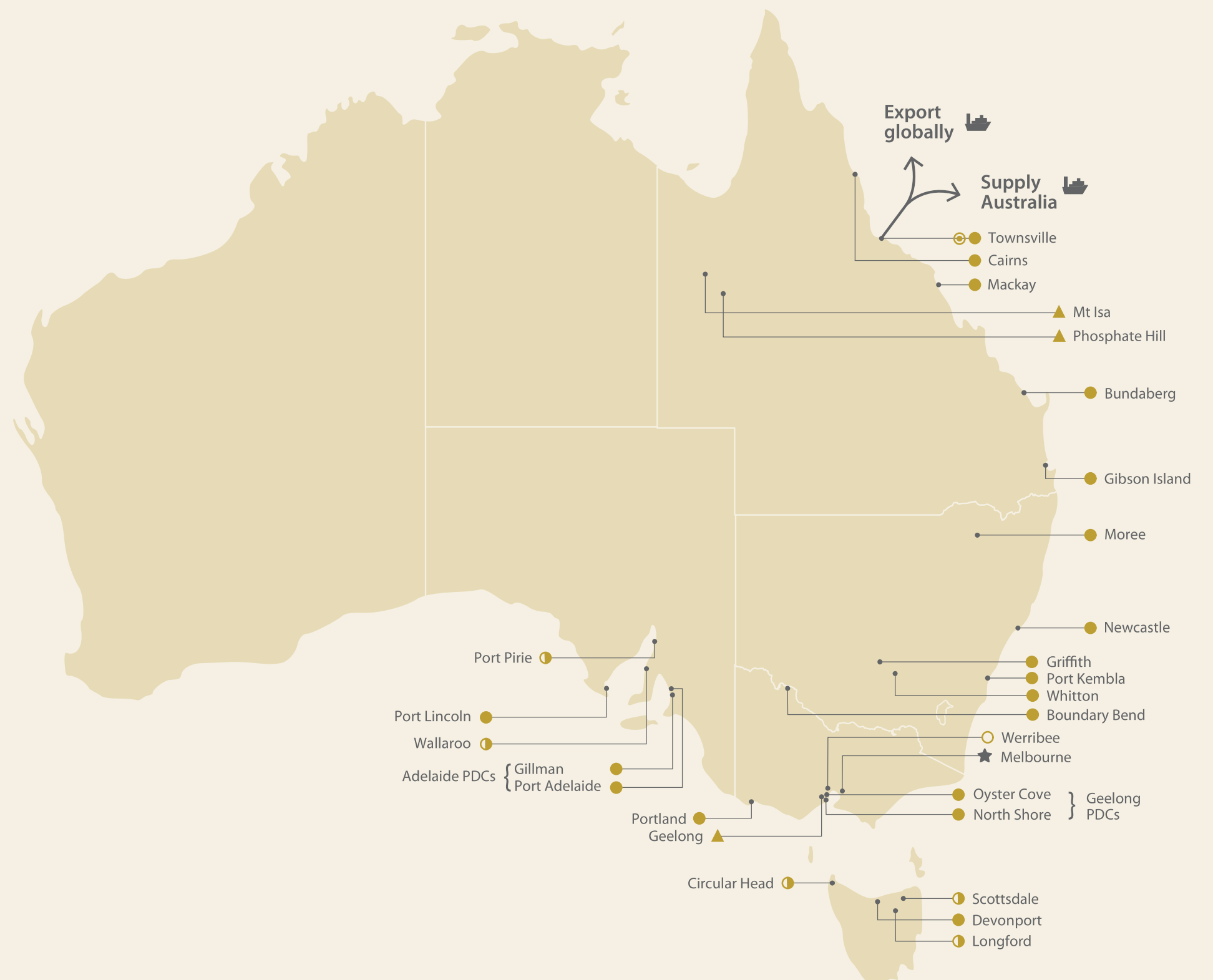
Incitec Pivot Fertilisers (IPF) is IPL's fertilisers business. With a long history in the Australian fertiliser industry that goes back over 100 years, we have demonstrated resilience through variable weather conditions, agricultural and economic cycles, and a dynamic technological and policy environment related to the clean energy transition.

Operating across Eastern Australia, IPF is one of the largest domestic manufacturers and suppliers of fertilisers by volume. During 2024, a range of fertilisers were 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 Mt Isa, and the Geelong Single Super Phosphate (SSP) manufacturing plant.

IPF's distribution network includes more than 17 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.

Our Incitec Pivot Fertilisers operations



How we create value





Reducing Our Environmental Impact

Environmentally responsible operations

Our fertiliser business plays a vital role in the sustainable growth of Australian agriculture. Through our products and services, we aim to assist our farming customers in maximising crop yields and productivity while improving soil health and reducing GHG emissions.

IPF aims to provide value-adding fertilisers and soil health services that increase the productivity and sustainability of our agricultural customers. Due to the challenges of climate change and meeting the needs of a growing population, the agricultural sector will need to farm more sustainably, increasing yields on existing cleared land.

There is increasing recognition that more sustainable farming practices can also result in increased productivity, and IPF remains well positioned to satisfy the growing demand for technology solutions that deliver. During 2024, we continued to work directly with farmers on a range of research trials and demonstrations of technologies that enhance productivity and reduce the GHG associated with the use of our products. Our customers are increasingly focused on technical innovation to drive yield, manage costs and reduce environmental impacts. This is translating to greater customer uptake of soil and plant testing, precision application of fertilisers and our Enhanced Efficiency Fertiliser (EEF) range.

Financial and impact risks
Risk of adverse environmental impacts from customer use of IPF's products and services.
Risk of overflow of water management systems during high rainfall events, resulting in fines and adverse environmental impacts.
Risk of water restrictions impacting regions with High Baseline Water Stress, or regions where this is expected to increase in the short to medium term, impacting IPF production and local communities.
Risk of fines and adverse environmental impacts resulting from the accidental release from our sites of hazardous chemicals, or nutrients, into air, soil or water.
Financial and impact opportunities
Opportunity to educate site employees about, and share knowledge on caring for, important natural ecosystems identified close to IPF sites through our Taskforce on Nature-related Financial Disclosures (TNFD) Locate, Evaluate, Assess and Prepare (LEAP) assessment.
Opportunity to develop products and services related to valuing natural assets managed by farming customers.
Continuing opportunity to expand both IPF's soil testing services, and contribution to enhancing farming customer and advisor education on soil knowledge and soil health best practice, resulting in more sustainable farming operations.
Opportunities associated with continued promotion of our EEFs, which reduce GHG from fertiliser use and leaching of nitrogen into waterways from customer farms.

Our approach to promoting sustainable use of fertilisers

Our products and services are designed to increase the productivity and sustainability of our agricultural customers through value-adding fertilisers and soil and plant testing services. We promote responsible application of nutrients through the strategy below.

USE ONLY WHAT IS NEEDED	Nutrient Advantage (NA)	Soil health starts with building a strong base of soil, crop and nutrient knowledge.	<ul style="list-style-type: none">– We operate Australia’s leading state-of-the-art soil, plant and water testing laboratory, run by experienced scientists and supported by a large network of expert advisors.– We have a continuous improvement program for our NA Pro decision support application to ensure that the most recent research drives nutrient recommendations. The system is assured by maintaining FERTCARE accreditation.– NA’s Soil Health Package has seen increasing demand, with a growing interest in the measurement of soil carbon. Our Soil Health Package analyses the biological, chemical and physical characteristics of soil health.– We have expanded our advisor network and our services and are working towards increasing the number of tests we run in the next five years.
USE IT WHERE IT IS NEEDED	Partnership with Precision Ag (formerly ‘Precision Agriculture’)	To address variations in yields and soil health across a field, we explore technology and automation solutions that enable variable rate application – delivering precise quantities where they are required.	<ul style="list-style-type: none">– IPF’s Nutrient Advantage is the exclusive supplier of laboratory services to Precision Ag.– IPF’s strategic partnership with Precision Ag has evolved in 2024, with IPF supporting expansion into new regions.
USE IT EFFICIENTLY	Liquid Fertilisers	Liquid fertilisers are a proven, easy, safe and more precise way of delivering essential plant nutrients on a large scale.	<ul style="list-style-type: none">– IPF’s Easy Liquids range has experienced rising sales volumes in 2024 against 2023. We have successfully integrated the liquid fertilisers business since it was acquired from Yara Nipro in 2022.
USE IT, DON’T LOSE IT	Enhanced Efficiency Fertilisers (EEFs)	These products help minimise nutrient losses to waterways and to the atmosphere as GHG emissions.	<ul style="list-style-type: none">– Demand for EEF products has grown by around 20% in 2024, supported by a \$4m investment in our fertiliser coating capacities across IPF distribution centres. This reflects growing awareness among farmers and advisers of the products’ efficacy in maximising yields and reducing GHG emissions.– IPF continues to invest in research and development to improve the efficacy of its EEF range, including as lead industry partner in the Australian Research Council funded Hub for Smart Fertilisers.

Managing our environment-related risks and opportunities

The management of identified risks relating to environmental impacts is integrated into IPF’s broader business strategy and risk management processes. As part of IPL, safety, productivity and environmental sustainability are considered when making decisions relating to IPF’s business strategy, major investments and capital expenditures, and the development of our internal policies, processes and products.

As for our Dyno Nobel business, IPF’s management of environment-related risks and opportunities is enacted through the IPL HSECMS. Identified risks are managed according to the IPL Group Risk Management Framework and the IPL Zero Harm Strategy, which includes strategies and targets related to managing environmental incidents. These systems and processes are under the oversight of the Board’s HSEC Committee and Zero Harm Councils, which are described in detail in the ‘Zero Harm’ section of the ‘People and Communities’ chapter of this report.

Collectively, these set out the principles, metrics and actions that all employees, from those at operational sites to executive leaders, must execute to achieve the Company Values of ‘Zero Harm for Everyone’ and ‘Care for the Community and our Environment’.

The HSECMS guides IPF’s identification and assessment of environment-related risks and impacts. Additional strategic risks and opportunities are identified through the IPF business unit’s strategic planning process. Risks and opportunities are maintained on business unit and site-based risk registers and evaluated using the Group Risk Management Framework for their likely impact on strategic business objectives, commercial targets and potential impacts relating to health, safety, environment and communities. These are then reported to business unit leaders, and included in business unit reports to the CEO & MD and the CRO on a monthly basis, as part of the Business Process Review.

Zero Significant Environmental Incidents and Regulatory Infringements in 2024

We target Zero Significant Environmental Incidents under our Zero Harm Strategy and are pleased to report that there were no Significant Environmental Incidents or Regulatory Infringements across IPF sites during the 2024.

To record near miss and incident data, and develop responses to existing and emerging environmental risks, IPF uses IPL’s whole-of-Group risk management and measurement systems, including Cintellate, Velocity EHS Risk, and the Group document management system GDRMS. These set out the standardised risk assessment and management methodologies for all of IPL’s global operations, and are designed to ensure employees, site managers and business unit managers take a comprehensive, rigorous and standardised approach to addressing environmental risks. The iPad-based iAuditor software is an additional tool used to record environmental risks identified during inspections.

Data collected from these is used to inform reports to senior business unit managers, the IPL Executive Team and the HSEC Committee.

During the year, IPF began a comprehensive review of its environmental management strategy to strengthen its whole-of-business approach to environmental risk management. This will be an ongoing priority into 2025.

Setting the standard for protecting the environment

The HSECMS includes 18 global HSEC Standards, which set out the minimum expected requirements for all employees and contractors, at all levels of the organisation and across functions and operations.

The following HSEC Standards are especially relevant to IPF’s management of environment-related risks and opportunities.

- » **HSEC Environment Standard (HSEC STD 11)**, which requires site managers to complete Environmental Assessments and environmental risk scans at all sites; to maintain a process to identify, implement and ensure compliance with IPL’s risk management and HSEC procedures, as well as local legislation and regulation; and monitor the sustainability performance of their operations through measurement of key operational activity indicators.
- » **HSEC High Hazard Activities Standard (HSEC STD 7)**, which requires site managers and senior leaders to develop and maintain full understanding of significant risks and critical controls for activities deemed ‘High Hazard Activities’; and to ensure compliance with IPL’s risk management and HSEC procedures as well as local legislation and regulation.
- » **HSEC Product Stewardship Standard (HSEC STD 15)**, which sets out requirements for business units to ensure their operations adhere to the responsible and ethical design and management of products, packaging and services throughout their entire product life cycle to protect the health of the public and the environment.

The HSEC Standards are 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 the Center for Chemical Process Safety. Current versions of the HSECMS and related documentation are available to all IPL employees and contractors via our OnBase employee portal.

Assessing our interactions with nature

During the previous reporting period, IPF conducted an initial 'LEAP Assessment' in line with the recommendations of the TNFD. LEAP stands for 'Locate, Evaluate, Assess and Prepare', the four phases of a structured evaluation designed to identify a company's material nature-related impacts, dependencies, risks and opportunities.

This TNFD assessment considered how IPF's operations and products (downstream) intersect with natural ecosystems, including ecosystems of concern. For example, as a fertiliser business, IPF's products interact with important natural cycles that support plant growth and can also impact animal and plant biodiversity. Our fertilisers contain nutrients that are part of the nitrogen and phosphorous cycles; the soils and crops they support interact with the water cycle and carbon cycle; and through our manufacturing processes, we use water, and fuels that are part of the carbon cycle. The evaluation included three 'deep-dive' assessments: our SSP manufacturing site in Geelong, Victoria and our Cairns Primary Distribution Centre in Queensland, which were selected due to their location within 50km of ecosystems of importance; and our research farm at Colonsay in Queensland, which was chosen as a proxy for customer farms which use our products. For each of these sites, the assessment mapped the risks and opportunities associated with our use of natural resources and our potential impacts on natural assets such as key biodiversity areas, protected areas, water stress and, for the Colonsay Farm, soil condition and applied nutrients.

IPF was one of the first Australian entities to undertake a TNFD assessment, which identified that the material nature-related impacts, dependencies, risks and opportunities for the business are already being managed as part of our risk management and business strategy processes. The full **IPF TNFD** is a Supplement to this Sustainability Report.

Sustainable products and services

Our products and services are designed not only to support more productive and financially sustainable agricultural practices, but also to reduce potential impacts from their use in the environments in which they are used.

IPF's strategic alliance with Precision Ag has continued to grow. Since 2022, our NA laboratory has been the exclusive supplier of laboratory services to Precision Ag, whose methodology for intensive soil management enables a more advanced understanding and management of nutrient application across paddocks. Our partnership has delivered better agronomic data and infrastructure for dealers, agronomists and consultants, helping farmers achieve more productive and sustainable outcomes.



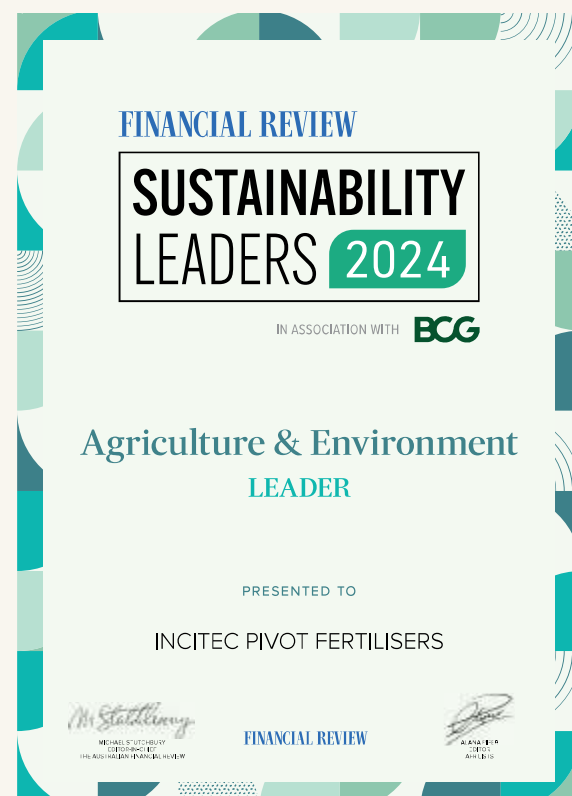
IPF's leadership recognised in 'Agriculture and Environment'

Our efforts to ensure sustainable operations throughout our business were recognised in July 2024 when IPF was recognised as a Sustainability Leader by the Australian Financial Review in the 'Agriculture and Environment' category.

The annual awards considered a number of entrants across six industry groups, with the contenders assessed using Boston Consulting Group's Sustainable Business Model Innovation (SBM-I) framework. Entries were rated on environmental, societal and business benefits; business model change; and market impact.

IPF was recognised for our commitment to research and development which has resulted in patented fertiliser technology that drives sustainability improvements in Australian agriculture: our innovative development and commercialisation of EEFs containing nitrogen-inhibitors, which reduce both N₂O to air as a GHG and nitrogen run-off, was recognised as a significant contribution to improving environmental outcomes associated with fertiliser use.

IPF was recognised along with Biomass Projects, whose work to embed carbon in soil through biochar was recognised; Lord of the Trees, for its use of drones to support reforestation; and Stafford Partners carbon offset fund, who are investing in new forests, forest restoration and forest management projects.



Leveraging our expert knowledge to support sustainable soil health for increased productivity

Soil health is a growing priority for our customers and stakeholders. Australia's National Soil Action Plan, released in November 2023, underscored the importance of mapping the state of soil health nation-wide, in order to invest in its future health.

This reflects the ongoing challenge for growers associated with declines and variations in soil health across arable land, which can impact yields. IPF has long recognised the vital importance of soil health, including soil biodiversity.

IPF has built a unique capability to understand the key characteristics of soils through NA, our analytical laboratory which offers specialist soil, plant and water testing to advisors and farmers. NA tests approximately 200,000 soil, plant and water samples each year, and has been supporting farmers for more than 60 years.

NA's Soil Health Package complements existing testing packages offered by NA. The Soil Health Package analyses

the interactions between the biological, chemical and physical elements of soil, and how they contribute to soil health. The package also interprets the results and provides recommendations on how to improve those areas. This tailored data is designed to help farmers make targeted improvements in under-performing fields, increasing their productivity and sustainability.

IPF has become the exclusive provider of soil research services to a number of organisations through NA. In 2024, and in line with the focus of the National Soil Action Plan, we have seen increasing demand in the measurement of soil carbon.

In addition, during 2024, IPF trained 146 agronomists and held over 100 knowledge sessions for farmers and agronomists to share our valuable knowledge and latest research findings.

This unique expertise and direct connection to a range of customers establishes IPF as a valuable potential contributor to a national understanding of soil health.

Enhanced Efficiency Fertiliser (EEFs)

Our EEFs keep nitrogen in stable forms in the soil for longer, improving uptake by plants and reducing the risk of nutrient run-off. They also reduce potential losses of nitrogen to the air as nitrous oxide, a GHG with a warming potential 273 times higher than CO₂.

Our eNpower® EasyN® fertiliser product (a combination of our proprietary nitrification inhibitor containing dimethyl pyrazole glycolate (DMP-G) and urea ammonium nitrate solution) has been shown to lower N₂O emissions from farm fields by up to 64%. This product moved from field trials and into full commercialisation in 2024.

IPF has continued to advocate the effectiveness of its EEF products as a contributor to Australia's Net Zero ambitions. During the previous reporting period, IPF assisted Fertiliser Australia to prepare a **white paper to the Australian Government** to inform stakeholders about nitrogen use in Australia, provide an understanding of nitrogen (N) losses in the Australian context, focusing on GHG emissions, and provide some recommendations on future policy options that could be considered. Published in October 2023, the paper included the positive emissions-reducing capabilities of EEFs, which have been shown to reduce GHG from fertiliser use on farms by up to 76%¹. The Government has since recognised the effectiveness of this technology, with Australia's Minister for Climate Change and Energy referring to nitrogen inhibited fertilisers as an example of strong innovation to deliver decarbonisation in Australia's agriculture and land management sector². To build on this important opportunity, IPF has registered its interest in collaborating on the development of a recognised methodology to quantify and recognise the GHG reductions associated with the use of EEFs in Australia.

Customers are also becoming aware of the benefits of nitrogen inhibited products, with a 20% increase in EEF sales in 2024. To meet the increasing demand, we have expanded the number of facilities manufacturing the EEF range. In the last five years IPF has invested over \$4m on EEF coating facilities, and we anticipate there will be another three new major projects associated with this product range in 2025. The growth in the market uptake of EEFs will have the additional benefit of reducing our Scope 3 GHG through reducing customers' on-farm emissions from the use of these products.

To ensure we respond comprehensively to emerging demand for our advanced product range, IPF has established a cross-functional steering committee with representatives from our procurement, research and development, commercial and sustainability functions. Supporting the growth of our value-added product range will remain a strategic priority for IPF into 2025.

Easy Liquids

IPF's liquid fertiliser products present a number of benefits for our farming customers. They are easy to handle, easy to store, resist deterioration while in storage, and can be applied using a wide range of existing farm application equipment. Most importantly, they can be applied precisely, using modern fertigation systems that combine fertiliser application with efficient irrigation techniques, ensuring only what is required to maximise yield is applied.

Since acquiring the Yara Nipro liquid fertiliser business in 2022, IPF has focused on integrating the acquisition into its broader product family, and developing market growth strategies. Demand for IPF's Liquid Products has grown compared to 2023, resulting in our port assets and manufacturing operations, which are strategically located in Adelaide, Geelong, Moree, Whitton and Boundary Bend, distributing over 70 million litres of liquid fertilisers in 2024. IPF is now the largest manufacturer and distributor of liquid fertiliser on Australia's east coast.

Trigger®

Our granular humate product, Trigger, is an air-dried, low-dust product, with a high concentration of humic acid. Humic acids support crop growth by holding onto nutrients, preventing them from leaching away from plant roots. In field tests, Trigger has demonstrated the ability to significantly reduce on-farm GHG emissions.

Humic acids have also been shown to improve soil properties through increasing water-holding capacity, cation exchange capacity and microbial activity – contributing to healthier and more fertile soils.

Using water sustainably

IPF recognises that water is a precious and essential resource. Large volumes of high-quality cooling water are required for the manufacture of ammonia at our Phosphate Hill, Queensland facility, and water is also a key input for the manufacture of sulphuric acid at Mt Isa, Queensland which is used to make ammonium phosphate fertilisers at Phosphate Hill, and for the manufacture of single super phosphate (SSP) fertiliser manufacture in Geelong.

In 2024 IPF reclaimed 147,117kL of water from waste gypsum stockpiles at Phosphate Hill, allowing both the reduction of fresh groundwater extraction and the recapture of valuable phosphates from the water. At Geelong, Victoria, 1,429kL of stormwater was captured and treated for reuse. This reduces municipal water use and prevents rainwater which may have high nutrient levels from leaving the site.

At Mt Isa, steam used in the on-site electricity generation turbine is condensed for reuse and any water drained from our cooling towers is returned to the nearby metal ore mine as process water. At our Townsville, Queensland Product Distribution Centre (PDC), we have increased our capacity to collect and store 'first flush' rainwater and reuse this captured water for cleaning activities and the site wheel bath, reducing site water use.

Also in 2024, IPF completed an important remediation and validation project at Pinkenba, Queensland. A historical site dating back to the early 20th century, IPF has sold the site but retains the obligations under our environmental licence for the site to address groundwater contamination issues. We are committed to completing the further work required to meet our obligations and relinquish the licence for this site.



Ensuring the sustainable use of water

To ensure careful management of water and to minimise our potential impacts on local aquatic ecosystems, our Operations Managers are responsible for assessing potential water risks for sites and the environment. These are recorded as part of each site's, and the IPF business unit's, risk registers.

In addition, an annual Group-wide review of water risks and water stress conditions across our sites is led by the Corporate Sustainability Manager, using the World Resources Institute's Aqueduct Tool. This Tool relies on a global database designed to measure, map and support the mitigation of water risks, including those driven by climate change, and provides projections of rainfall, population and expected baseline water stress for each region to 2025, 2030 and 2040.

In addition, water risks are included in our future climate-related risk scenarios, which are updated every three years using the latest IPCC projections. Updated in 2024, these indicate that average annual rainfall across the lower half of Australia is likely to decrease, with variability increasing in the northern half of Australia. As a result, longer periods of drought may be created, potentially leading to water restrictions becoming more frequent in some areas, including at IPF's Gibson Island, Geelong and Mt Isa sites.

The results of these analyses are integrated into the development of IPF's risk management and business strategy processes, with water risks and management strategies being reported to the Executive Team's SSC and to the HSEC Committee.

1 Meng, Y., et al (2021) Geoderma, Nitrification inhibitors reduce nitrogen losses and improve soil health in a subtropical pastureland (388). <https://www.sciencedirect.com/science/article/abs/pii/S0016706121000215>.
2 Bowen, Chris (2024), Speech to Sustainable Agriculture Summit, Toowoomba, Queensland. <https://minister.dcccew.gov.au/bowen/speeches/speech-sustainable-agriculture-summit-toowoomba-queensland>.

Managing hazardous substances and waste

As our operations require the handling and disposal of hazardous substances and waste, IPF places the highest priority on ensuring these substances do not compromise the safety of its employees or the environment. As IPF's operations are entirely within Australia, hazardous wastes are defined and managed according to the Australian State regulations listed in the SASB index of our **2024 GRI Index and Data Supplement** to this report.

At the Group level, the loss of containment of a hazardous substance is one of the 14 specific risk events identified as being both of high likelihood and of highest health, safety and environmental (HSE) consequence. This list of 14 events comprises IPL's HSE Broad Risk Categories, which provides a basis for HSE risk governance by IPL's Executive Team Zero Harm Council and the Board's HSEC Committee. Please see the 'Zero Harm to our People' section of this report for a detailed overview of the HSEC risk governance process, which also applies to risks relating to the handling of hazardous substances.

We ensure that our employees safely handle these substances in line with our HSECMS and its Standards – particularly the Environmental Standard and High Hazard Activities Standard. As with other environmental risks, hazardous substance-related risks and incidents are documented in our risk management systems. IPF mitigates the risk of loss of containment incidents through appropriate storage and handling equipment and practices. In addition, a systematic and regular inspection program is implemented to identify containment hazards and any leaked or spilled products. All sites have spill management plans applicable to both bulk granular and liquid products as a component of each site's Environmental Management Plan. These plans are based on the principles of Control, Contain and Clean-up. For sites which present significant loss of containment risks, Emergency Response Plans are in place to control a release event and minimise the impacts.

Solid waste

The amount of solid waste produced by IPF in 2024 was 1,977 tonnes which was 7% less than in 2023. Phosphogypsum waste from our Phosphate Hill ammonium phosphate manufacturing facility in Queensland was 3,241,880 tonnes. This waste is stockpiled at the site for dewatering and will be capped in future and revegetated to match local landforms.

Liquid waste

The amount of liquid waste produced by IPF declined by 187% in 2024, reaching 2,058kL. This decline is mostly due to the cessation of manufacturing at Gibson Island, Queensland. Of the total liquid waste, 193kL, or 9%, was hazardous liquid waste, and 97% of this hazardous liquid waste was recycled. A total of 405kL of liquid waste was sent offsite, and 1,654kL, or 80% of this, was nutrient-rich water that was repurposed as a fertiliser product, or used for other downstream purposes, such as woodchip additive.



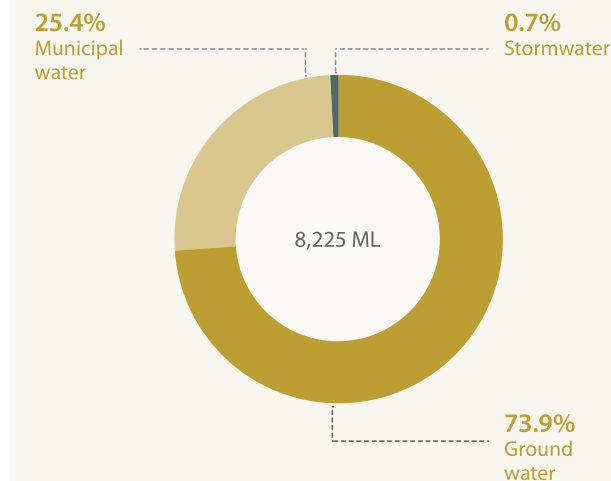
Recycling and using recycled content bags across our operations

In 2024, IPF continued to partner with Big Bag Recovery to collect our fertiliser bags from farming customers and dealers for recycling. While most of our product is sold in bulk with no packaging, approximately 15% is sold in one tonne and small pack woven polypropylene (WPP) bags. During 2024, 354 tonnes of our fertiliser bags were collected for recycling. This avoided an estimated 381 tonnes of GHG and preserved approximately 671m³ of landfill space.

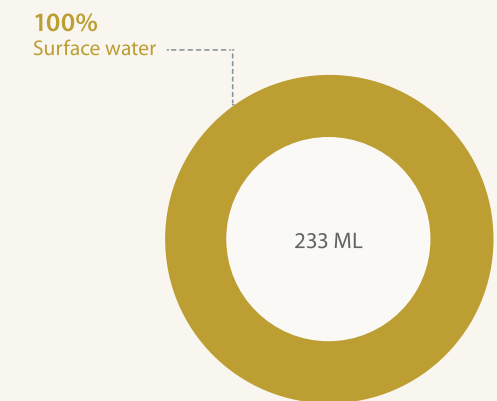
For the first time, IPF is also set to introduce fertiliser bags containing recycled plastics across our operations. Due to safety concerns, obtaining recycled content bags has been difficult in the past. However, a new contract with industrial bag manufacturer BHA will see new bags rolled out from October 2024. The bags will be clearly marked 'Bag Contains 30% Recycled PP'. The estimated CO₂ reduction from using 30% recycled plastic content is 225.5 tCO₂e per annum.



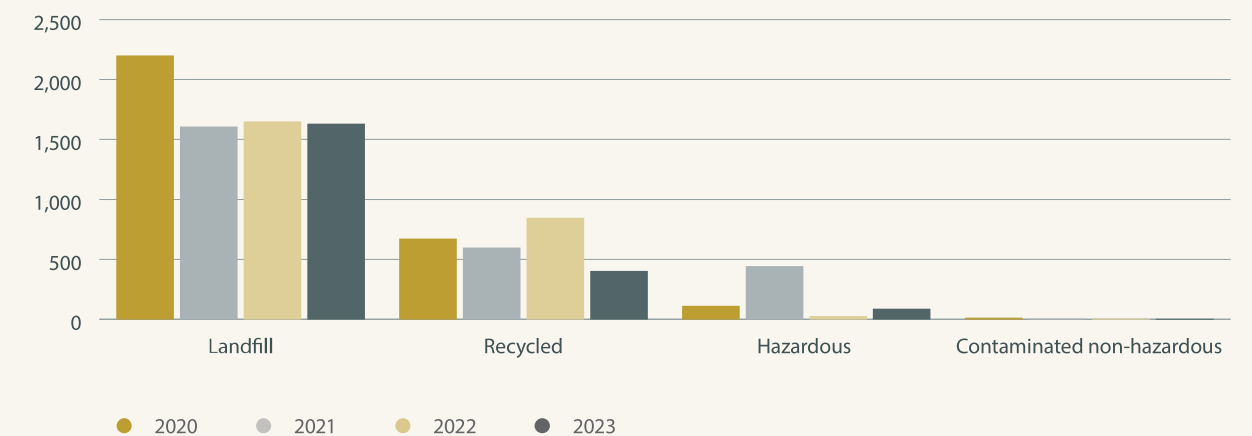
IPF water withdrawal by source (ML)



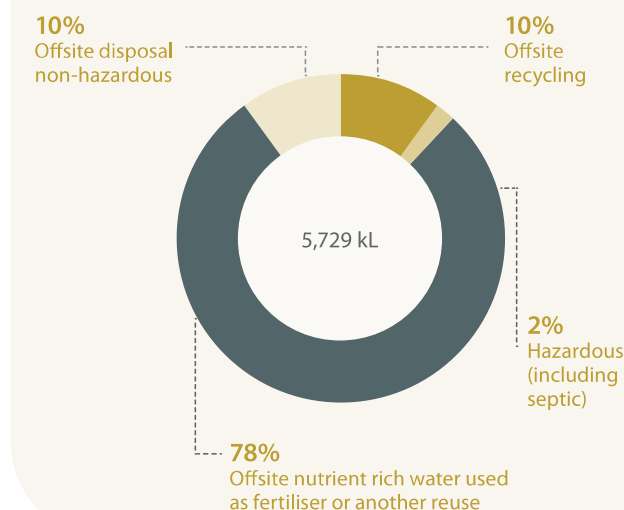
IPF water discharge by destination



IPF solid waste (metric tonnes)



IPF liquid waste by destination (kilolitres)





Customers and Supply Chain

Our fertiliser business leverages its close industry partnerships and relationships with customers to guide our research, drive innovation and enhance the efficacy of our products and services. This is a vital ingredient to how we contribute to a growing agricultural sector that is profitable and environmentally sustainable.

Financial and impact risks
Risk of physical impacts of climate change disrupting supply chains.
Risk of conflict, or threat of conflict or piracy disrupting international supply chains.
Risks associated with single source suppliers.
Risk of products impacting on customer safety.
(Risks associated with the environmental impacts of our products are covered in the 'Environment' section)
Financial and impact opportunities
Opportunity to strengthen customer relationships and trust in IPF's brand through customer trials of new products and research partnerships with recognised and respected institutions.
(Opportunities associated with reducing the environmental impacts of our farming are covered in the 'Environment' section, with strategies described under 'Products and services that reduce environmental impacts')

Customer and research partnerships

Our customers are increasingly focused on technical innovation to drive yields, manage costs and reduce their environmental impacts. IPF aims to remain a trusted partner through continuing to provide close and targeted support for customer needs. In 2024 we continued a number of research and collaboration partnerships with customers and universities, and commenced work on an updated customer portal that will optimise the customer experience using modern digital technologies.

In 2024, we continued to partner with farmers, resellers/ agronomists and researchers to test and promote the effectiveness of our EEF range in improving nitrogen use efficiency and reducing GHG emissions on farms – both of which contribute to more financially and environmentally sustainable agricultural operations for our customers. These trials and demonstrations aimed to provide data on both the productivity and GHG reductions associated with the use of our products on customer farms.

We have also continued to pursue partnerships with industry peers, peak bodies and university researchers to rigorously test and document how EEFs work to better explain their efficacy. IPF remains the lead partner in the Australian Research Council-funded Hub for Smart Fertilisers, and is continuing to support its research on how these increase nitrogen use efficiency (NUE).



Measuring GHG emissions from fertilisers on farms

In 2024 IPF's Research and Development team, led by Research Agronomist Robert Impraim, developed and field tested a simple technique to measure nitrous oxide (N₂O) and ammonia (NH₃) emissions from soils fertilised by a range of products, including our EEF products, on the farm.

The goal was to be able to work with growers to capture gases emitted from their soils using different fertilisers, and monitor, in a real-world setting, EEFs' emissions reduction potential. A practical, simple and inexpensive measurement system was required for this task.

The IPF team developed a network of non-steady state chambers which can be placed over a section of the soil's surface. Over time, gases emitted from the soil were collected in these chambers, allowing the amount of these two gases to be measured.

The results of the field trial proved the success of the new methodology, and IPF plans to roll it out across several new field sites in New South Wales. The objective is to measure emissions across different soil types, cropping systems and fertilisers, resulting in a comprehensive database that can be used to model and predict emissions based on different types of soils and fertiliser applications. Such a database may be useful in developing a standard methodology to quantify the GHG reductions associated with our EEFs across different soil types and cropping regions in eastern Australia.



Research partnerships on EEFs

In 2024 IPF partnered with a number of industry peers and academics to launch a new \$17m national research project, led by the University of Melbourne and the Grains Research and Development Corporation (GRDC). The goal of this project is to test the efficacy of EEFs in different climates and agricultural ecosystems where grains are grown, and quantify their economic and environmental benefits. The project will involve a network of field trials across Australia, in a variety of soils and cropping systems, where EEFs will be tested against conventional nitrogen fertilisers.

The aim of the project is to demonstrate the effectiveness of different EEFs within the grains industry and provide growers with clear recommendations regarding which technologies will perform best in their production systems to maximise their return on investment. The research will run for four years and is expected to publish results in 2028.

Product stewardship and customer safety at IPF

Our Product Stewardship standards are set out in Standard 11 of the HSECMS and include measures to ensure the responsible and ethical design and management of products, packaging and services throughout their entire lifecycle to protect public and customer health as well as the environment. Progress is reported to the HSEC Committee of the Board via the Business Strategy Development and Review process, to ensure IPF is providing its customers with products that enhance safety, productivity and environmental sustainability.

In 2024, IPF collaborated with Fertiliser Australia on the new revision of a Code of Practice for Fertiliser Description and Labelling. It has also updated information design and content on fertiliser bag tags and printed advice to ensure customers have clear advice on compliance requirements with GHS and Code of Practice regulations. IPF's Factsheets, Agritopics and Use Directions, designed to provide customers with additional advice on the application of their products and broader soil and crop health care, are also being updated to ensure they remain aligned with the latest agronomical science.

Sustainable supply chains

During 2024, our business and our customers faced a number of challenges including ongoing supply chain disruptions, volatile prices resulting from geopolitical tensions, international government fertiliser policy changes and ongoing conflict in Europe and the Middle East.

Maritime supply chain challenges were especially disruptive. Conflicts in or near key sea-borne trade lanes, such as the Red Sea, have caused the diversion of shipping from the Suez Canal to a lengthy, and often costly, navigation around the African continent. This, added to commodity price volatility resulting from broader geopolitical pressures – including the ongoing conflict between Russia and Ukraine – has maintained shipping price volatility. Closer to home, congestion at several ports on Australia's eastern and southern seaboard caused lengthy and costly delays.

Managing our supply chain risks

As with the management of environment-related risks, IPF takes an integrated approach to the identification, assessment and management of supply chain-related risks. Supply chain risks are identified by the IPF business unit, maintained on its risk register and are evaluated using the Group Risk Management Framework for their likely impact on business strategic objectives and commercial targets as well as financial impacts on IPF. To support supply chain resilience, cross-functional teams continue to work on diversifying supply networks, addressing raw material risks and reducing reliance on single source suppliers where possible.

Risks are reported to business unit leaders, and included in business unit reports to the CEO & MD and the Chief Risk Officer on a monthly basis, as part of the Business Process Review. Mitigants are designed with reference to the Group-wide risk management and process methodology.

Similarly, as reported in the 'Ensuring ethical conduct and business practices' section of the People and Communities chapter, IPF's management of human rights and modern slavery risks in our supply chain is governed in line with our Code of Conduct, Human Rights Policy and Modern Slavery Policy. As described in more detail under 'Ensuring ethical conduct and business practices' in the People and Communities section of this report, HRWG plays the lead operational role in developing and monitoring policies, and ensuring the adoption of modern slavery and human rights risk management processes at IPF. Identified risks and metrics on incidents, compliance with IPL's relevant policies and participation with training requirements are reported to the Ethics Committee and the ARMC is the Board-level body ultimately responsible for overseeing the management of modern slavery-related risks. In 2024, 107 IPF employees completed our e-learning module on Modern Slavery in the supply chain.

Partnerships to mitigate supply chain risks

IPF's supply chain risks are difficult to manage and working with key partners can make a difference. IPF has provided the Queensland Government with insights to support the optimisation of freight transport on the Mt Isa rail corridor. The government has committed \$2 million in the *Queensland Transport and Roads Investment Program 2024-25 to 2027-28* to examine the feasibility of this project.

The need to minimise supply chain risks features in IPF's strategic plans, as evidenced by the decision to partner with Perdaman Chemicals and Fertilisers on a 20-year offtake agreement for 2.3 million tonnes of urea per year. This constitutes an important investment in on-shoring Australia's need for a consistent supply of urea as well as augmenting IPF's existing export trade. In 2024 the project has continued to progress, and is on track to meet its target of commissioning by mid-2027.

Supporting Australian First Nations Suppliers

To support Australian First Nations suppliers IPF has incorporated targets for our procurement team relating to the amount spent on goods and services from First Nations businesses, and the number of new First Nations suppliers engaged. In Australia, we have created a dedicated role to manage our Ethical Procurement agenda. As part of IPL's Innovate RAP, our procurement team has worked to increase opportunities and spend on First Nations businesses, suppliers and workers in the last three years. In 2024, IPF exceeded our targeted procurement spend with First Nations businesses, with a 43% increase on 2023 spend.



Phosphate Hill responds to climate-related supply chain risks

IPF’s Phosphate Hill, Queensland facility is Australia’s only manufacturer of ammonium phosphate fertilisers. ‘Phos Hill’, as it is affectionally known by its staff, mines up to two million tonnes of phosphate rich carbonate rock every year, from which it extracts phosphate to manufacture di-ammonium phosphate (DAP) and mono-ammonium phosphate (MAP) fertilisers. These are railed from Phosphate Hill to the Port of Townsville, Queensland for distribution through IPF’s extensive distribution network, which stretches from Cairns, Queensland in the north to Port Lincoln, South Australia in the south. DAP and MAP is also exported from Townsville, Queensland to international markets. Together with the world-scale sulphuric acid plant in Mt Isa, Queensland which provides most of the acid required to extract the phosphate from the rock, Phosphate Hill and its supporting facilities are an integrated end-to-end operation.

Located approximately 160km south of Mt Isa, Phos Hill is isolated and reliant on a single rail line connecting the site with Mt Isa and the Port of Townsville – a rail corridor vulnerable to seasonal flooding.

In 2019 a major rail outage occurred when a one-in-one-hundred year flood damaged the rail line, requiring third party infrastructure to be rebuilt and IPF to invest in major contingency planning.

In January 2024, Hurricane Kirrily caused extensive flooding which cut the rail line between Phosphate Hill and Townsville for the entire month of February – preventing the transportation of fertilisers to distribution networks.

Responding with agility on the basis of its pre-prepared contingency plans and scenario planning, IPF’s supply chain team was able to quickly switch to road transport, trucking 28,000 tonnes of fertiliser to maintain customer supply across February and March. Despite the disruption, both the phosphate mine and manufacturing plants continued to operate, and fertilisers were delivered to customers.



Glossary

OUR COMPANY

ARMC:	The Board’s Audit and Risk Management Committee
Board:	Board of directors of Incitec Pivot Limited
CDSO:	Chief Development and Sustainability Officer
CFO:	Chief Financial Officer
CHSEOEO:	Chief Health, Safety and Environment and Operations Excellence Officer
CPO:	Chief People Officer
CRO:	Chief Risk Officer
CTO:	Chief Technology Officer
DNA:	Dyno Nobel Americas
DNAP:	Dyno Nobel Asia Pacific
HSEC Committee:	The Board’s Health, Safety, Environment and Community Committee
IPF:	Incitec Pivot Fertilisers
IPL or the Company:	Incitec Pivot Limited
KMP:	IPL’s Executive Key Management Personnel
KPI:	Key Performance Indicator
LOMO:	Dyno Nobel Americas’ Louisiana, Missouri ammonium nitrate manufacturing facility
The Group, We, Us or Our:	Incitec Pivot Limited and its subsidiaries
Titanobel:	Titanobel, France
WALA:	Dyno Nobel Americas’ ammonia manufacturing facility located in Waggaman, Louisiana

OTHER

AASB: The Australian Accounting Standards Board (AASB) is the Australian government agency responsible for developing, issuing and maintaining accounting standards in Australia. Following the 9 September 2024 vote by the Australian Parliament to pass the Treasury Laws Amendment Bill, a new mandatory corporate reporting regime in respect of climate will come into effect from 1 January 2025. This mandatory regime is known as AASB 2, and will be complemented by a voluntary reporting regime for broader sustainability matters (AASB 1).

ARENA: ARENA is the Australian Renewable Energy Agency. The agency supports the global transition to net zero emissions by accelerating the pace of pre-commercial innovation, to the benefit of Australian consumers, businesses and workers.

Biodiversity: The variability among living organisms from all sources, including terrestrial, marine and other aquatic ecosystems. The term also includes diversity within species, between species, and in ecosystems.

Biomes: Global scale zones, generally defined by the type of plant life that they support in response to average rainfall and temperature patterns (e.g. tundra, coral reefs or savannas).

Carbon dioxide equivalent (CO₂e): The universal unit of measurement to indicate the global warming potential (GWP) of each of the six greenhouse gases, expressed in terms of the GWP of one unit of carbon dioxide. It is used to evaluate releasing (or avoiding releasing) different greenhouse gases against a common basis.

Climate: The weather conditions prevailing in an area/region in general or over a long period.

Dependencies: Aspects of ecosystem services that an organisation or other actor relies on to function.

Ecosystem: A dynamic complex of plant, animal and micro-organism communities and the non-living environment, interacting as a functional unit.

Ecosystem services: The contributions of ecosystems to the benefits that are used in economic and other human activity. These comprise: (a) provisioning services, which include any type of benefit that people can extract from nature; (b) cultural services, which include non-material services such as recreational activities, aesthetic inspiration, cultural identity and spiritual significance; and (c) regulating and maintenance services, which refers to the way in which ecosystems maintain and regulate the quality of land, air and water (e.g. through flood control).

Endangered species: Species considered to be facing a very high risk of extinction in the wild.

Environmental assets: The naturally occurring living and non-living components of the Earth, together constituting the biophysical environment, which may provide benefits to humanity. A list of environmental assets, as recognised by the TNFD’s ‘Fundamental Concepts for Understanding Nature’, included on page 3 of our [IPF TNFD Supplement](#).

Future Climate Related Scenario: A scenario describes a path of development leading to a particular outcome. A climate change scenario describes a path of development leading to a set degree of rise in temperature above pre-industrial global average temperatures. Our climate scenarios are described in Chapter 4 of the IPL Climate Change Report (2022).

Global Reporting Initiative (GRI): A leading organisation in the sustainability field, promoting the use of sustainability reporting as a way for organisations to become more sustainable and contribute to sustainable development. GRI has pioneered and developed a comprehensive Sustainability Reporting Framework that is widely used around the world. To see the GRI indicators covered by our sustainability web pages and publications, see IPL’s GRI Index and Data Supplement.

IFRS: The International Financial Reporting Standards (IFRS) were established in 2001, taking over the role of the International Accounting Standards Committee to harmonise global financial reporting standards. In June 2023 the IFRS, under the leadership of the International Sustainability Standards Board (ISSB – see below) issued its first two sustainability standards: one focused on general sustainability disclosures (IFRS 1) and another focused on climate-related disclosures (IFRS 2). These have been influential for a number of emerging national sustainability disclosure regimes, including Australia’s mandatory climate and voluntary general sustainability reporting regulations (see AASB, above).

Impacts: Changes in the state of nature which may result in changes to the capacity of nature to provide social and economic functions. Impacts can be positive or negative, and they may result from an organisation’s or another party’s actions, and may be direct, indirect, and cumulative.

Impact drivers: A measurable quantity of a natural resource that is used as a natural input to production, or a measurable non-product output of business activity (e.g. CO₂ emissions).

ISSB: The Trustees of the IFRS Foundation announced the formation of the International Sustainability Standards Board (ISSB) on 3 November 2021 at COP26 in Glasgow. The ISSB is developing – in the public interest – standards that will result in a high-quality, comprehensive global baseline of sustainability disclosures focused on the needs of investors and the financial markets.

Key Biodiversity Area: A site contributing significantly to the global persistence of biodiversity. A global list of Key Biodiversity Areas is curated by the KBA Partnership of leading global nature conservation organisations, and can be found at <https://www.keybiodiversityareas.org>.

‘LEAP’ assessment: The LEAP assessment is a recommendation from the Taskforce on Nature-related Financial Disclosures (TNFD – see below) to help reporting entities identify, evaluate and report on their nature-related dependencies, impacts, risks and opportunities. Organisations undertaking the LEAP assessment must: Locate their interactions with nature, Evaluate their impacts and dependencies, Assess their risks and opportunities, and Prepare for disclosures. IPL undertook an initial LEAP assessment of its IPF operations in 2023, which has been published this year. See the [IPF TNFD Supplement](#).

Material: In the context of the GRI Reporting Framework, ‘material’ topics for a reporting organisation are those topics that have a direct or indirect impact on an organisation’s ability to create, preserve or erode economic, environmental and social value for itself, its stakeholders and society at large. A material risk or opportunity for IPL is one which, if realised, could have an impact of \$A20m or more on EBIT.

Megatrend: Our materiality assessment defines a megatrend as a large, transformative global force that defines the future by having a far-reaching impact on business, economies, industries, societies and individuals. A megatrend is distinguished from other trends in that it cannot be stopped or significantly altered, even by powerful actors such as governments.

NAIDOC Week: An Australian observance lasting from the first Sunday in July until the following Sunday. The acronym NAIDOC stands for National Aborigines and Islanders Day Observance Committee.

Natural capital: The stock of renewable and non-renewable natural resources that combine to yield a flow of benefits to people. These include living and non-living entities such as plants, animals, air, water, soils and minerals.

Nature: The natural world, with an emphasis on the diversity of living organisms (including people) and their interactions among themselves and with their environment. ‘Nature’ includes the natural resources, systems and cycles which humans depend on, such as minerals and energy; weather systems; the water cycle; carbon, nitrogen and phosphorus cycles; and resources such as the soil in which we grow our food.

Nature-related opportunities: Opportunities relating to natural resources, systems and cycles or to the restoration or protection of natural resources, systems and cycles.

Nature-related risks: These pertain to potential threats to an organisation and its sustained success, linked to their and wider society’s dependencies on nature and nature impacts. These may include (a) nature-related physical risks (e.g. threats to an organisation from disruptions to natural systems, resulting in changes to living and non-living conditions that sustain the ecosystems on which businesses rely); (b) nature-related systemic risks (e.g. threats relating to the collapse of entire ecosystems, rather than a decline in part of an ecosystem); and (c) nature-related transition risks (e.g. threats to an organisation stemming from a misalignment between that organisation’s strategy and management, and a changing regulatory, policy or societal landscape).

Near miss: An unplanned event that did not result in injury, illness or damage – but had the potential to do so. The aim of the investigation of ‘near miss’ events is to identify and mitigate root causes, providing a focus for improvement.

NOx: A generic term for the mono-nitrogen oxides NO and NO₂ (nitric oxide and nitrogen dioxide).

N₂O: Nitrous oxide (di-nitrogen oxide), listed as one of six greenhouse gases covered by the Kyoto Protocol and the Greenhouse Gas Protocol.

Paris Agreement: A global climate agreement that was reached under the United Nations Framework Convention on Climate Change (UNFCCC) at the 21st Conference of the Parties (COP21) in Paris (30 November to 12 December 2015) to limit average global temperature rise this century to well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius.

Physical risks: Physical risks resulting from climate change can be event-driven (acute) or longer-term shifts (chronic) in climate patterns. Physical risks may have financial implications for organisations, such as direct damage to assets and indirect impacts from supply chain disruption. Organisations’ financial performance may also be affected by changes in water availability, sourcing and quality; food security; and/or extreme temperature changes impacting organisations’ premises, operations, supply chain, transport needs, and employee safety.

Plant: The equipment used to manufacture a specific product e.g. ammonia. There may be several plants on a single IPL site.

Realms: Major components of the living, natural world that differ fundamentally in ecosystem organisation and function. In the TNFD’s framework, these are: land, freshwater, ocean and atmosphere.

SafeGround: IPL seeks to create a culture of SafeGround, which we define as ‘an environment of psychological safety in which people feel safe to raise concerns and make suggestions’. It is an essential part of a safety culture.

SASB: The Sustainability Accounting Standards Board (SASB) Standards help companies disclose relevant sustainability information to their investors. Available for 77 industries, the SASB Standards identify the sustainability-related risks and opportunities most likely to affect an entity’s cash flows, access to finance and cost of capital over the short, medium or long term.

Scope 1 emissions: Direct GHG emissions which occur from sources that are owned or controlled by the Group, for example emissions from combustion in owned or controlled boilers, furnaces, vehicles etc, and emissions from chemical production in owned or controlled process equipment.

Scope 2 emissions: Scope 2 emissions are GHG emissions which arise from the generation of purchased electricity consumed by the Group. Purchased electricity is defined as electricity that is purchased or otherwise brought into the organisational boundary of the Group. scope 2 emissions physically occur at the facility where this electricity is generated.

Scope 3 emissions: A GHG emissions reporting category that allows for the treatment of indirect emissions (other than scope 1 and 2 emissions). scope 3 emissions are a consequence of the activities of the Group, but occur from sources not owned or controlled by the Group. Our scope 3 emissions and calculation methodology are reported in Appendices 3 and 4 of the IPL Climate Change Report (2022).

Significant Environmental Incidents: Environmental Incidents as assessed against IPL’s internal risk matrix with actual consequences of 5 or higher on a six-level scale. A Category 5 environmental incident is ‘a major event or Environmental repeat non-compliance with regulatory, licence or permit conditions leading to prosecution or restriction of operations’ and a Category 6 environmental incident is one which results in ‘permanent or long-term impacts to water, land, biodiversity, air or ecosystems and requires significant remediation, rectification or investment in mitigation’.

Site: A single geographic location where IPL operations take place.

SOx: Sulphur oxide emissions, for example, sulphur dioxide (SO₂). Sulphur oxides arise from the burning of fossil fuels that contain sulphur and during the burning of sulphur to make sulphuric acid.

Supply chains: A sub-set of our value chain, referring to the companies who supply the inputs to our operations, such as raw materials for manufacturing, service providers and providers of other inputs such as electricity and water.

Transition risk: Transitioning to a lower-carbon economy may entail extensive policy, legal, technology and market changes to address mitigation and adaptation requirements related to climate change. Depending on the nature, speed and focus of these changes, transition risks may pose varying levels of financial and reputational risk to organisations.

TCFD: The Financial Stability Board Taskforce on Climate-related Financial Disclosures (TCFD) is a market-driven initiative, set up to develop a set of recommendations for voluntary and consistent climate-related financial risk disclosures in mainstream filings.

TNFD: The Taskforce on Nature-related Financial Disclosures (TNFD) is a risk management and disclosure framework to enable organisations to report on and respond to nature-related risks. The TNFD’s final recommendations were released in September 2023. TNFD comprises UN organisations, financial institutions and corporates with over US\$20 trillion in assets.

TRIFR: Total Recordable Injury Frequency Rate – the number of recordable incidents per 200,000 hours worked; includes contractors unless otherwise indicated.

UN SDGs: The UN SDGs are a set of 17 goals and 169 targets adopted by world leaders at the United Nations to end poverty, fight inequality and tackle climate change by 2030. Although primarily designed for governments, the SDGs call for action by all countries and stakeholders.

UNGC: The UN Global Compact (UNGC) is the world’s largest corporate sustainability initiative – transforming businesses and raising ambitions towards the achievement of societal goals. The UN Global Compact Network Australia (UNGCA) is the Australian business-led network of the UN Global Compact.

Value chain: Our value chain includes our suppliers (and potentially their suppliers), our operations, our distribution channels, and our customers who are the end users of our products. Our supply chains (described above) are a sub-set of this.

Water stress: Water stress may refer to the availability, quality or accessibility of water in relation to human and ecological demands for water.



Forward looking statements

This report contains forward looking statements, including, but not limited to: statements regarding trends in commodity prices and supply and demand for commodities; assumed long-term scenarios; potential global responses to climate change; regulatory and policy developments; the development of certain technologies; the potential effect of possible future events on IPL and the plans, strategies and objectives of the organisation. Forward looking statements may be identified by the use of terminology, including, but not limited to, 'intend', 'aim', 'project', 'see', 'anticipate', 'expect', 'estimate', 'plan', 'objective', 'believe', 'may', 'should', 'will', 'would', 'continue', or similar words. These statements refer to future results, asset conditions or financial conditions, or provide other forward looking information. The forward looking statements in this report are based on the information available as at the date of this report and/or the date of the Group's planning processes or scenario analysis processes.

There are inherent limitations with the use of forward looking statements and in particular where they relate to scenario analysis, and it is difficult to predict which, if any, of the scenarios might eventuate. Scenarios do not constitute definitive outcomes for IPL. Scenario analysis relies on a range of assumptions that may or may not be, or prove to be, correct and may or may not eventuate, and scenarios may be impacted by additional factors to the assumptions disclosed. Additionally, forward looking statements are not guarantees or predictions of future performance, and involve known and unknown risks, uncertainties and other factors, many of which are beyond our control, and which may cause actual results to differ materially from those expressed in the statements contained in this report. IPL cautions against reliance on any forward looking statements or guidance.

To the extent permissible by law, IPL disclaims all liability to any third party who uses or relies on any forward looking statements or guidance in this report. For example, future decarbonisation opportunities identified and described in this report will be based, in part, upon the availability and reliability of alternative and developing technologies, and incentives and support from government bodies and the industry, which may differ from assumptions, estimates and forecasts. These variations may affect the timing or the feasibility of the development of a particular technology or project, and its subsequent adoption and use by IPL or the broader industry more generally.

Except as required by applicable regulations or by law, IPL does not undertake any obligation to publicly update or review any forward looking statements, whether as a result of new information or future events. Forward looking statements are current only as at the earlier of the date of this report or the date the planning process assumptions or scenario analysis assumptions were adopted, as relevant and applicable. Past performance cannot be relied on as a guide to future performance.

The views expressed in this report contain information that has been derived from publicly available sources that have not been independently verified. No representation or warranty is made as to the accuracy, completeness or reliability of the information. This report should not be relied upon as a recommendation or forecast by IPL.

