

ESG opportunities for the agriculture sector in Queensland

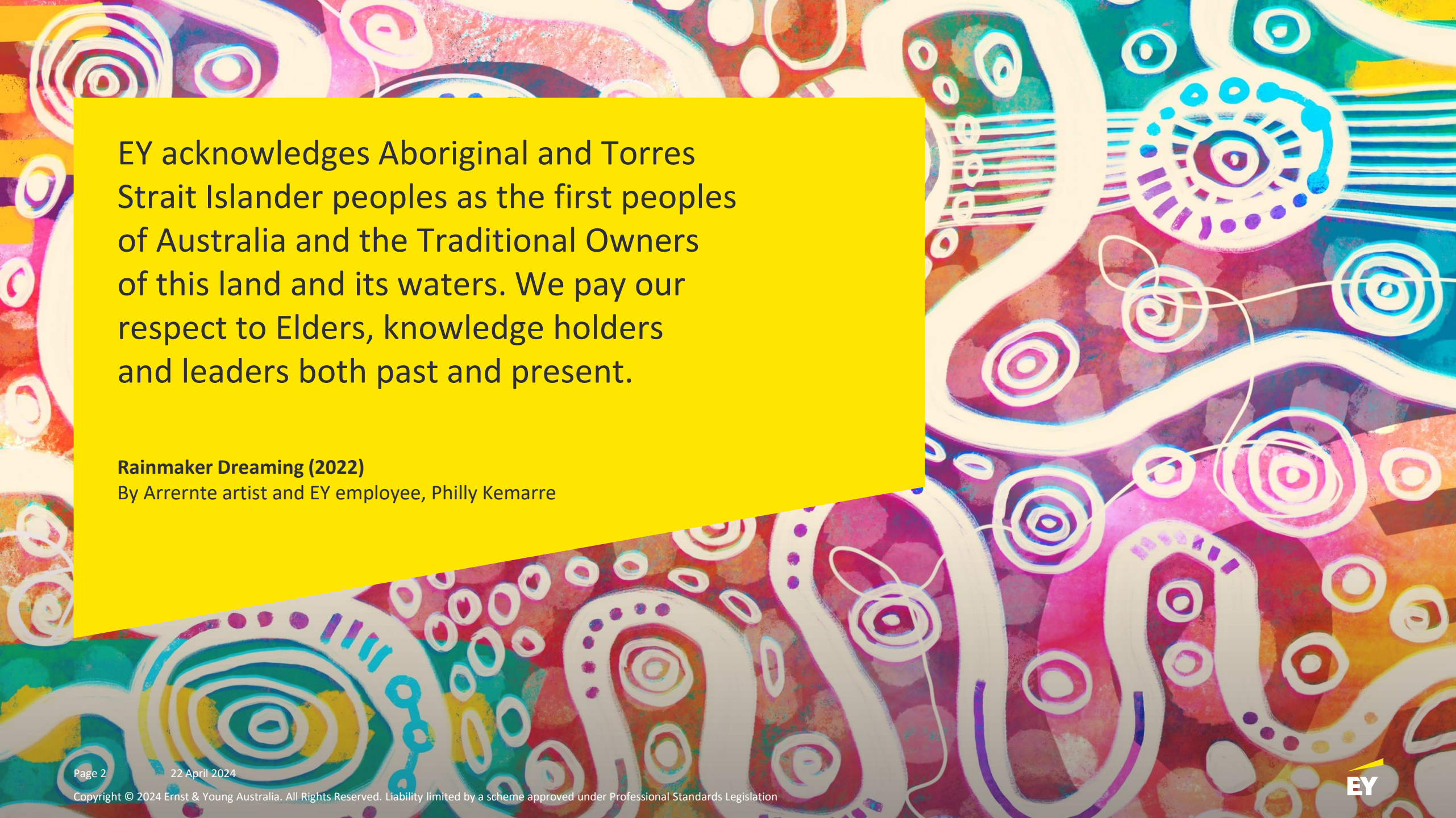
Queensland Agri-ESG Community of Practice

22 April 2024



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EY acknowledges Aboriginal and Torres Strait Islander peoples as the first peoples of Australia and the Traditional Owners of this land and its waters. We pay our respect to Elders, knowledge holders and leaders both past and present.

Rainmaker Dreaming (2022)

By Arrernte artist and EY employee, Philly Kemarre

Agenda

1 ESG and sustainability

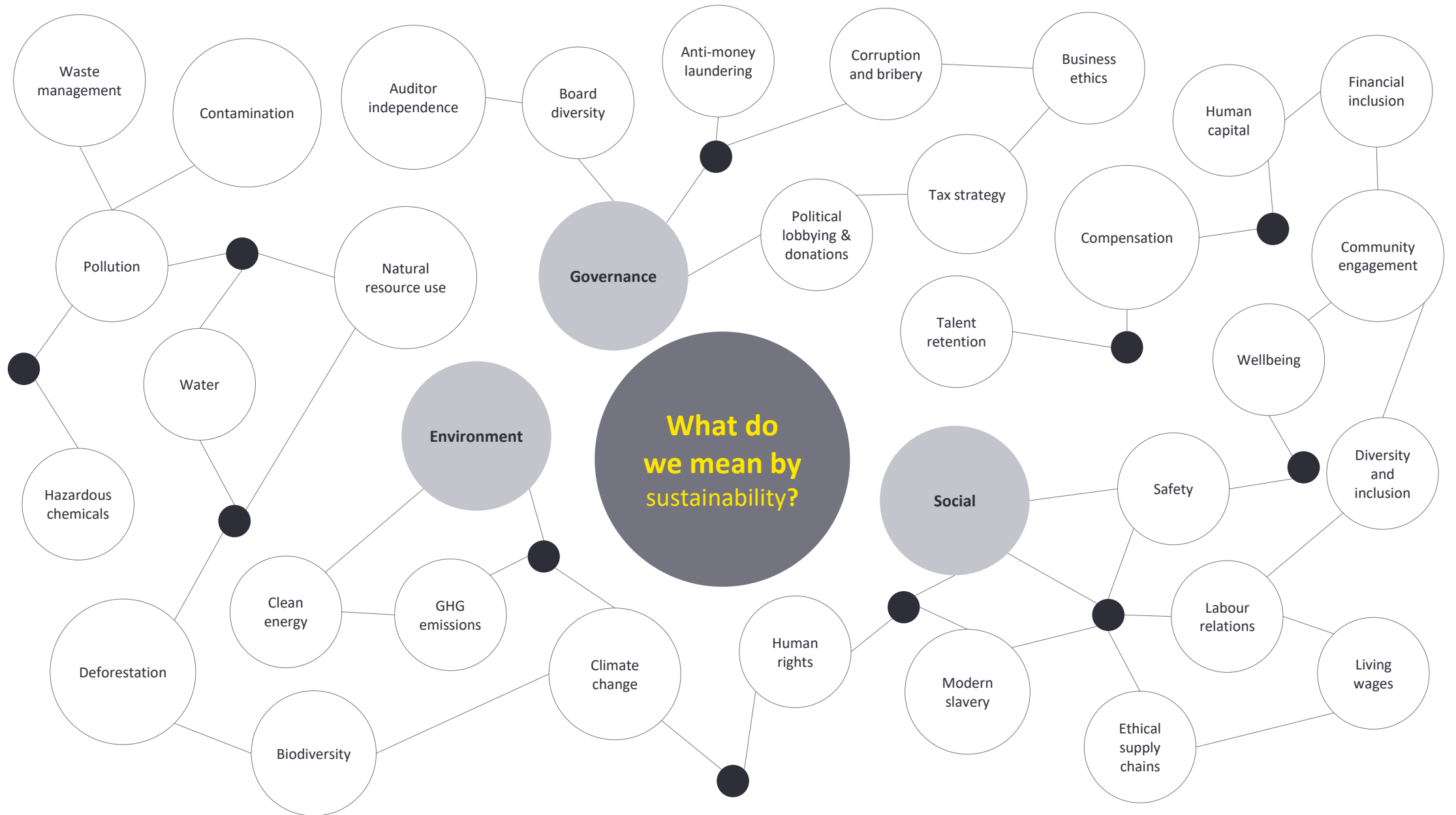
2 ESG drivers

3 Focus areas and challenges

4 How can agribusinesses respond to ESG?

5 Q&A





Defining sustainability and ESG

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Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

The Brundtland Report 'Our Common Future', 1987

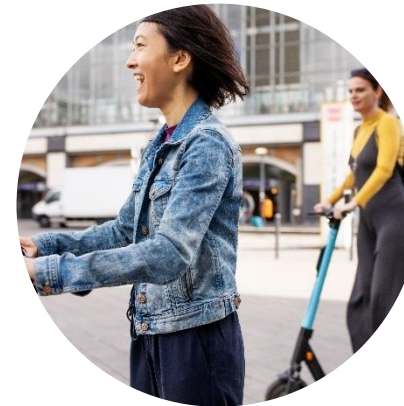


The creation of **long-term value** for the **environment and society, now and into the future**

Environmental



Social



Governance



Top global risks ranked by severity



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
1 st	Financial Failure	Financial Failure	Financial Failure	Water Crises	Climate Action Failure	Weapons of Mass Destruction	Weapons of Mass Destruction	Weapons of Mass Destruction	Climate Action Failure	Infectious Diseases	Climate Action Failure	Cost-of-living Crisis
2 nd	Water Crises	Water Crises	Climate Action Failure	Infectious Diseases	Weapons of Mass Destruction	Extreme Weather	Extreme Weather	Climate Action Failure	Weapons of Mass Destruction	Climate Action Failure	Extreme Weather	Natural Disaster & Extreme Weather Events
3 rd	Food Crises	Fiscal Imbalances	Water Crises	Weapons of Mass Destruction	Water Crises	Water Crises	Natural Disasters	Extreme Weather	Biodiversity Loss	Weapons of Mass Destruction	Biodiversity Loss	Geoeconomic Confrontation
4 th	Fiscal Imbalances	Weapons of Mass Destruction	Unemployment	Interstate Conflict	Involuntary Migration	Natural Disasters	Climate Action Failure	Water Crises	Extreme Weather	Biodiversity Loss	Social Cohesion Erosion	Failure to Mitigate Climate Change
5 th	Energy Price Volatility	Climate Action Failure	Infrastructure Breakdown	Climate Action Failure	Energy Price Shock	Climate Action Failure	Water Crises	Natural Disasters	Water Crises	Natural Resource Crises	Livelihood Crises	Erosion of Social Cohesion & Societal Polarization

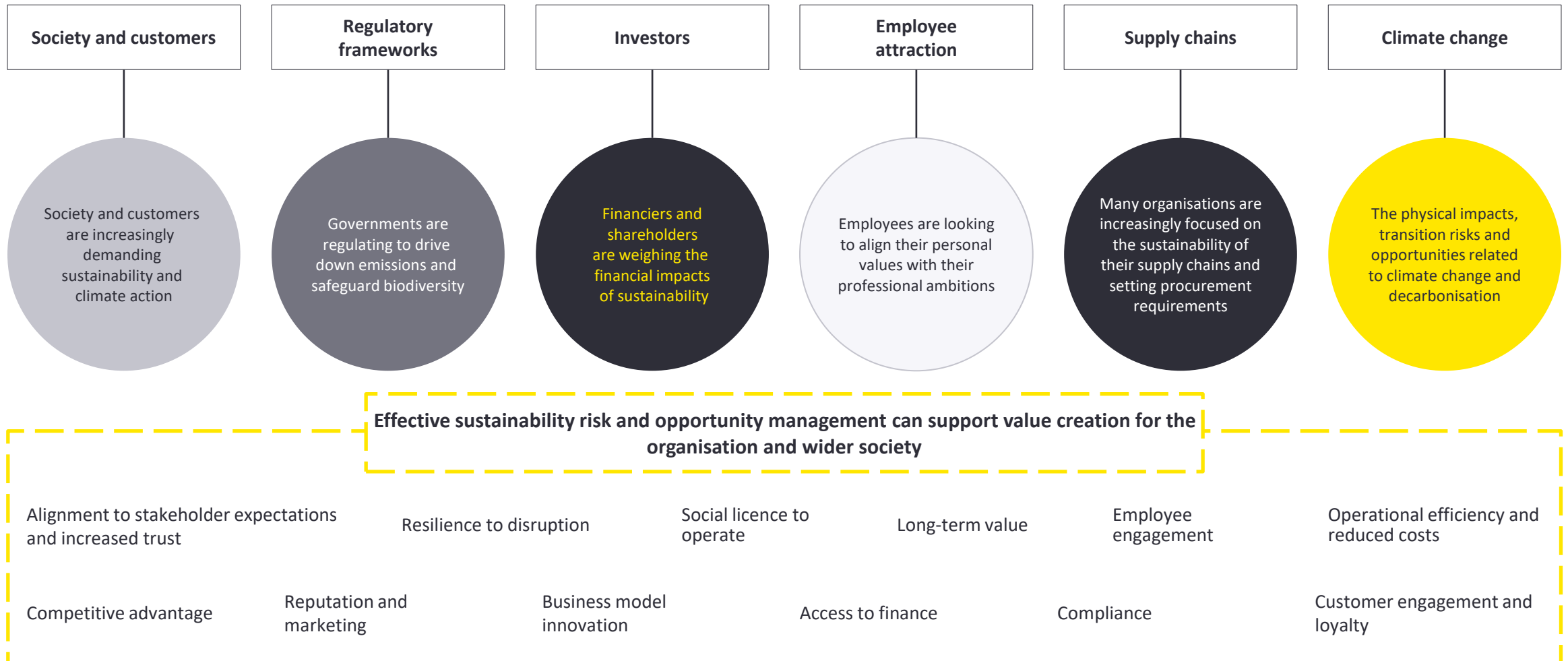
	1 st	2 nd	3 rd	4 th	5 th
2024 2 years	Misinformation and Disinformation	Extreme Weather Events	Societal polarization	Cyber Security	Interstate Armed Conflict
10 years	Extreme Weather Events	Critical Change to Earth Systems	Biodiversity Loss and Ecosystem Collapse	Natural Resource Shortages	Misinformation and Disinformation

■ Economic
 ■ Environmental
 ■ Geopolitical
 ■ Societal
 ■ Technological



External drivers for sustainability and ESG action

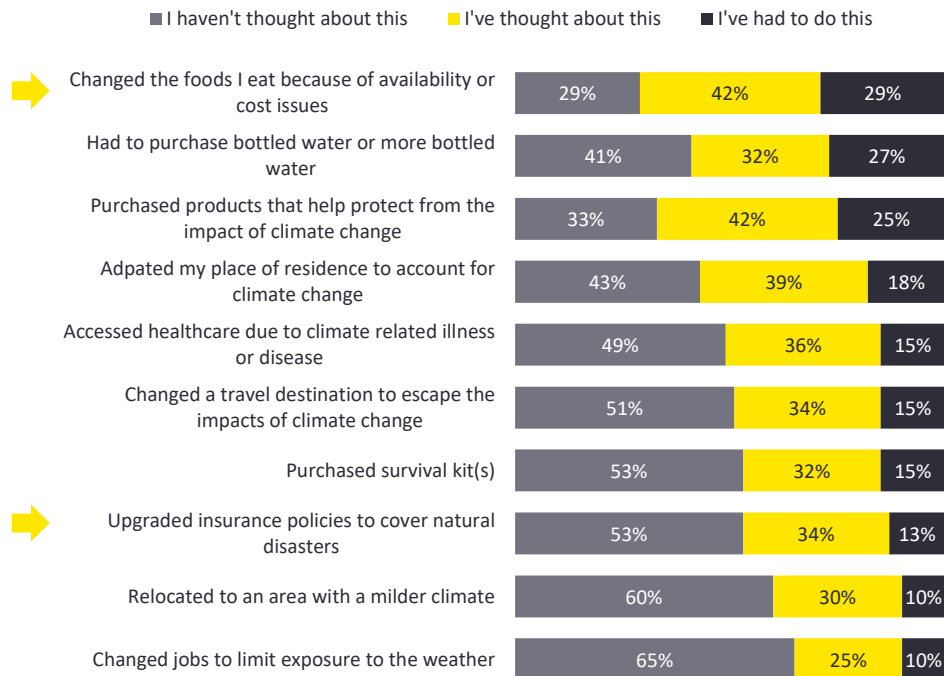
Companies are increasingly faced with new challenges to understand what it means to be a sustainable organisation and respond to multiple stakeholder needs.



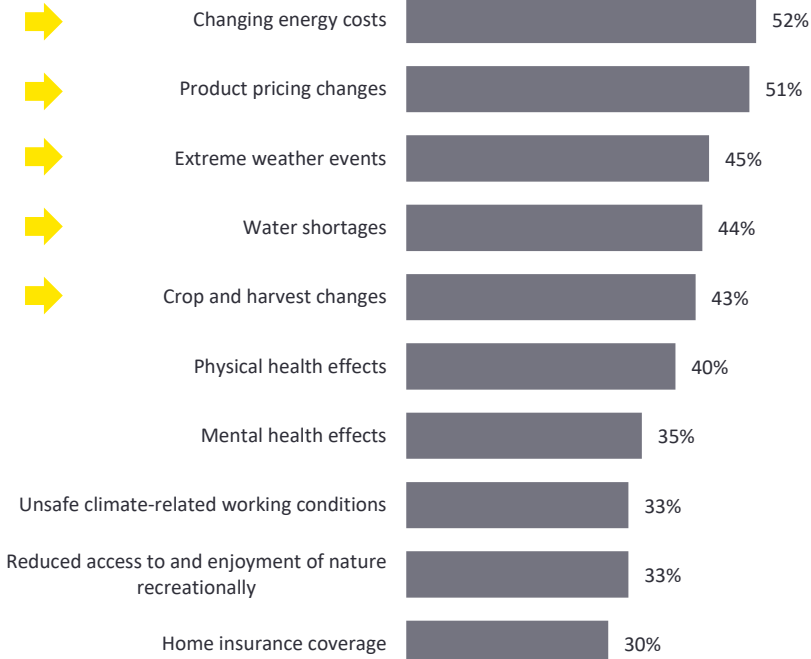
Market trends across investors and consumer preferences

- ▶ Many consumers have already been forced to change how they live and what they buy because of the impact of climate change, according to EY global research.
- ▶ People are increasingly willing to pick sustainable products and to pay more for them, although this is still a growing minority view.
- ▶ Consumers are worried about the health of the planet and expect companies to show more leadership to reduce negative impact and increase positive impact.

Measures taken by consumers impacted by climate change



% Share of consumers impacted by climate change



90% of investors place importance on a company's ESG performance when making investment decisions.

52% of consumers say they have more trust for companies that publicly share long-term sustainability and responsibility goals.

60% of surveyed business executives indicated that ESG information resides in a patchwork of software applications.

Source: 1 — Is your ESG data unlocking long-term value? https://www.ey.com/en_uk/assurance/is-your-esg-data-unlocking-long-term-value | Source: 2 — The next frontier of sustainable choices - ey-sustainability-consumer-and-business-perspective (4).pdf | Source: 3 — How finance professionals are helping to advance ESG reporting - https://assets.ey.com/content/dam/ey-sites/ey-com/en_us/news/2022/ey-how-finance-professionals-are-helping-to-advance-esg-reporting.pdf | Source: 4 — EY Future Consumer Index: when talk turns into action, be set for change - https://www.ey.com/en_gl/insights/consumer-products/when-talk-turns-into-action-be-set-for-change

Global and domestic landscape across ESG agenda and regulatory frameworks

National and global policy and regulatory trends are **accelerating expectations for sectors including agriculture to take action on sustainability.**

	Global			Australia		
ESG agenda	<p>Taskforce on Climate-related Financial Disclosure (TCFD)</p> <p>Sustainability Accounting Standards Board (SASB)</p> <p>Global Reporting Initiative (GRI)</p>	<p>Taskforce on Nature-related Financial Disclosure (TNFD)</p> <p>The Global Biodiversity Framework</p>	<p>International Sustainability Standards Board (ISSB)</p> <p>Climate & Nature Action 100</p>	<p>Australian company directors and nature-related risk</p> <p>Climate and nature strategies (Federal, States, Territories and LGAs)</p>	<p>Nature Repair Market</p> <p>Meat and Livestock Australia Carbon Neutral 2030 (CN30)</p>	<p>Net zero targets (Federal, States and Territories)</p> <p>Emissions Reduction Fund (Federal)</p>
Regulations	<p>Regulation on deforestation-free products</p> <p>Sustainable Finance Disclosure Regulation (SFDR)</p>	<p>Carbon Border Adjustment Mechanism (CBAM)</p> <p>Mandatory climate-related disclosures</p>	<p>Modern slavery legislation</p> <p>Mandatory climate-related disclosures</p>	<p>Australian Sustainability Reporting Standards (ASRS) (Federal)</p> <p>Vegetation management (QLD)</p>	<p>Modern Slavery Act (Federal)</p> <p>Reef Protection Regulations (QLD)</p>	<p>Reforms to EPBC Act (Federal)</p> <p>Environment Protection Australia (Federal)</p>

Climate change

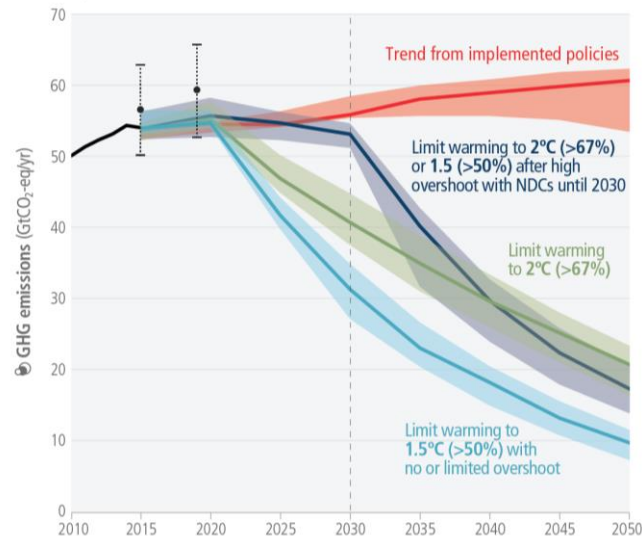
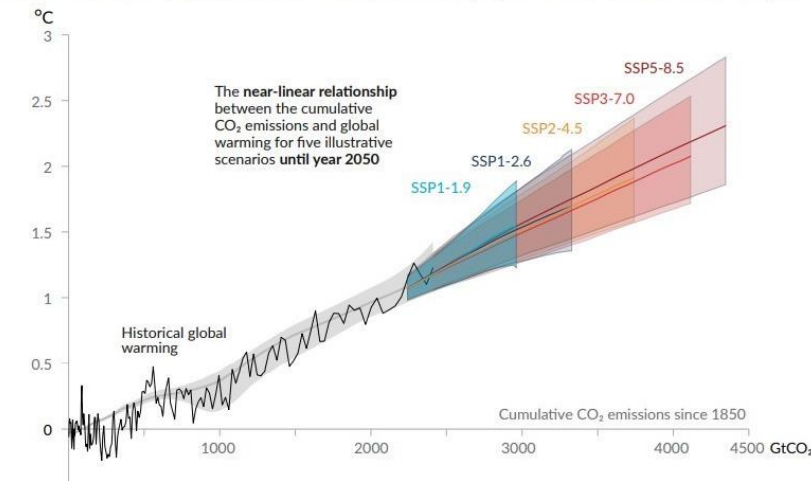
Every tonne of carbon dioxide equivalent (tCO₂e) adds to global warming.

Acute physical risks include increased intensity of cyclones, severe floods and drought events.

Chronic physical risks include changes in precipitation patterns, rising mean temperatures and sea level

Projected global GHG emissions from NDCs announced prior to COP26 would make it likely that warming will exceed 1.5°C and also make it harder after 2030 to limit warming to below 2°C.

Global surface temperature increase since 1850–1900 (°C) as a function of cumulative CO₂ emissions (GtCO₂)

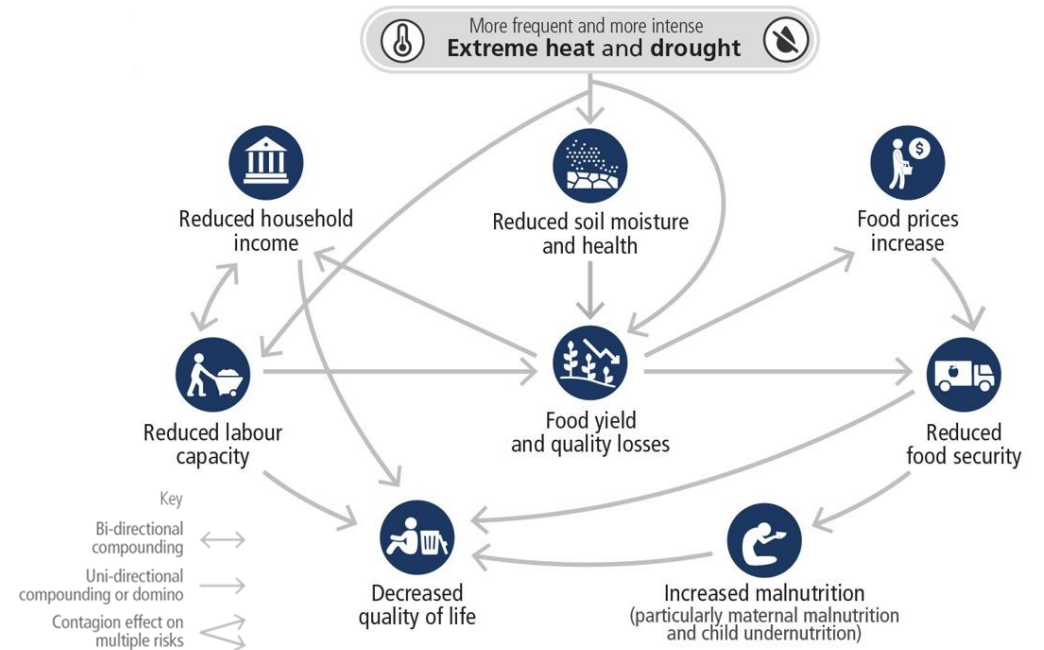


Source: IPCC, AR6

Cascading effects from climate change will have a significant impact across environmental, economic and social aspects.

- ▶ This may include food production, nutrition, livelihoods and the well-being of small landholders and farmers.

Multiple climate change risks will increasingly compound and cascade in the near term

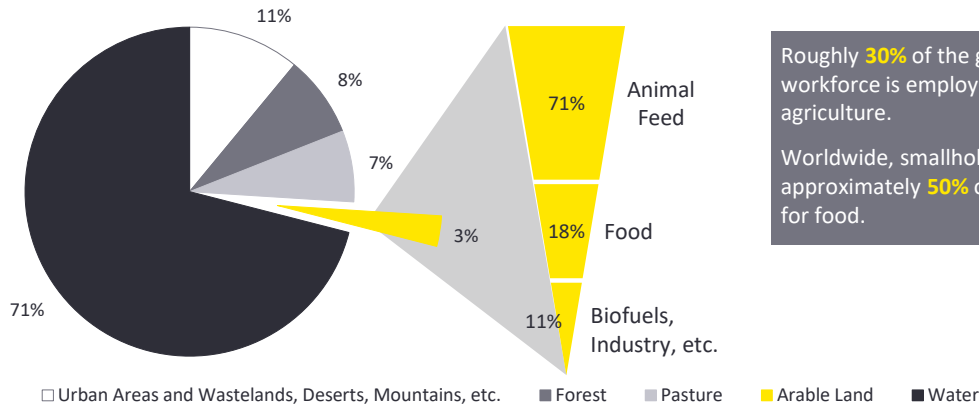


Source: IPCC, AR6

The agriculture industry is a driver of social, economic and environmental outcomes at regional, national and global levels

Global

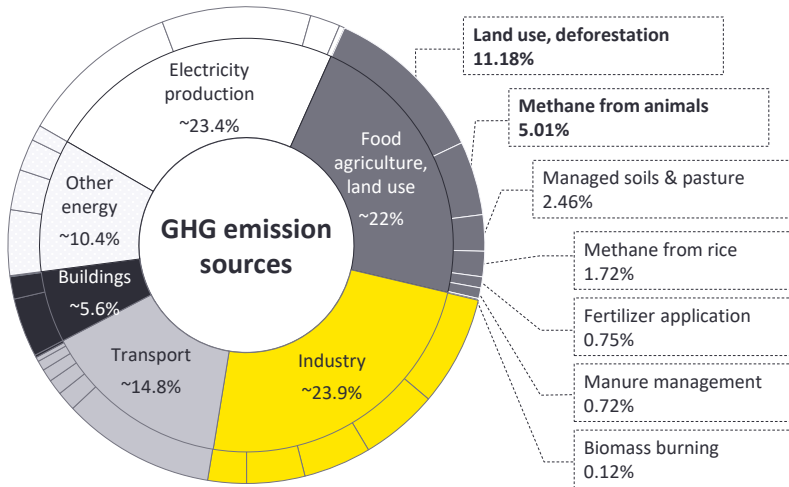
Only a small part of the Earth's surface is arable land



Roughly **30%** of the global workforce is employed in agriculture.

Worldwide, smallholders meet approximately **50%** of the demand for food.

Source: The Future of Agriculture and Food, Handelsblatt Research Institute, Bayern



Source: Minx et al. (2021) and IPCC Sixth Assessment Report, Working Group Three

Global emissions from agriculture and food systems:

Contributes to **22-34%** of global GHG emissions. Biggest contributor to GHG emissions is deforestation 10-11%, whereas emissions across the value chain (transportation, packaging, refrigeration, cooking and food waste) are estimated to be 10-12%.

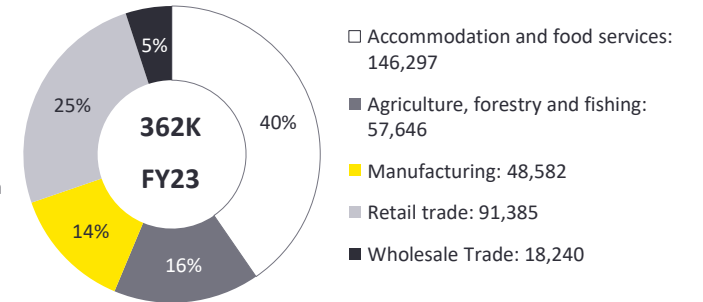
Queensland

Exports:

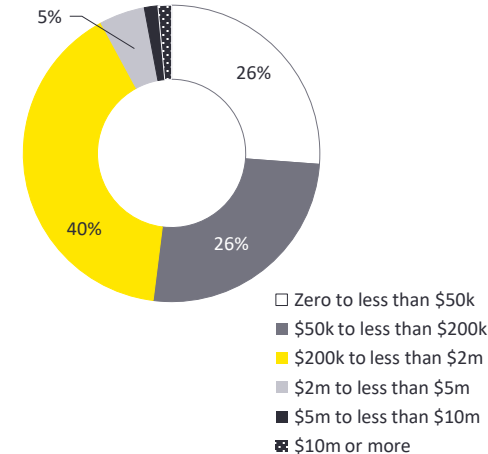
- ▶ **\$12.5 billion** total agriculture, fisheries and forestry export value for 2022-23
- ▶ **\$6.3 billion** meat from bovine animals
- ▶ **\$464 million** vegetable and fruit export value (excluding chickpeas and other leguminous vegetables)
- ▶ China, South Korea, Japan, USA and Indonesia (**\$8.42 billion / 67%**)
- ▶ **\$11.5bn (92%)** exported through Brisbane Port

Source: Queensland Government, Department of Agriculture and Fisheries, 2024

Employment by industry group ANZSIC (FY23) across agri-food value chain

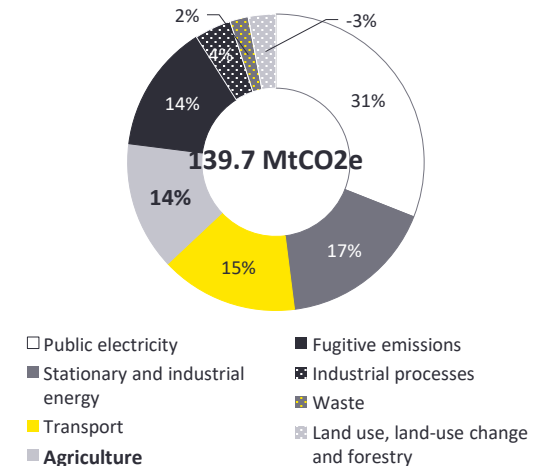


No. of business by turnover size



Source: Queensland Government, Department of Agriculture and Fisheries, 2024

Queensland's 2021 net GHG emissions

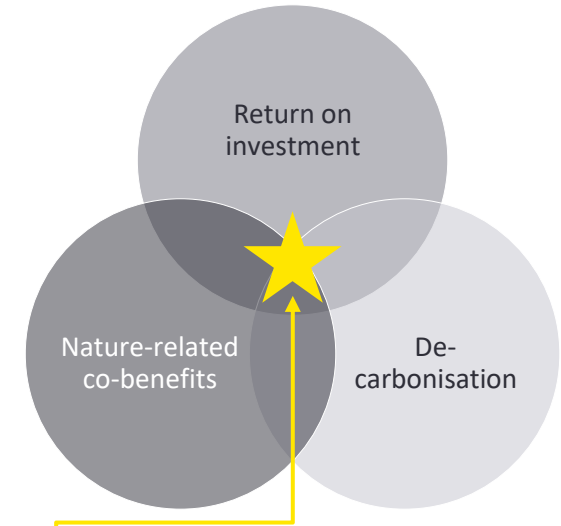


Source: National Greenhouse Accounts 2021

Capitalising the opportunity linked to decarbonisation and environmental markets

The EY report for Farmers for Climate Action titled 'How can Australia's agriculture sector realise opportunity in a low emissions future?', identifies key economic opportunities for decarbonisation and natural capital co-benefits including improved land management and land use change.

In particular, there is a substantial economic opportunity associated with mechanisms such as nature markets, carbon farming and associated co-benefits.



Synergies for the agriculture and forestry sectors to accelerate the transition to net-zero and support better environmental and economic outcomes

Priority decarbonisation activities for agriculture and forestry

Methane reduction

- ▶ Feed supplements and forages
- ▶ Selective breeding
- ▶ Vaccination
- ▶ Reduced time to market
- ▶ Biogas capture and waste management

Transport and electricity

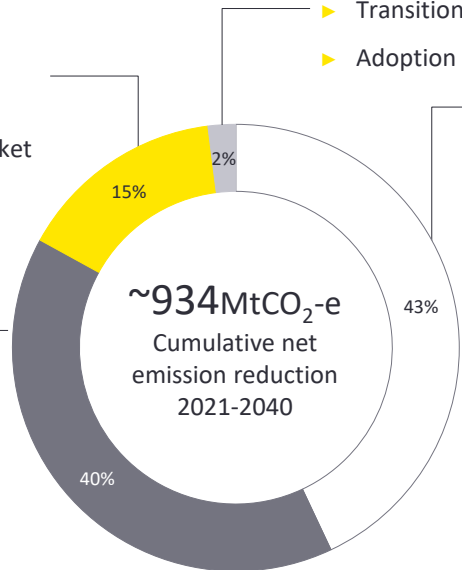
- ▶ Transition to electric vehicles on farm
- ▶ Adoption of renewable energy on farm

Improved land management

- ▶ Cropland carbon sequestration
- ▶ Degraded farmland restoration
- ▶ Improved pasture management
- ▶ Improved grassland management
- ▶ Savanna burning
- ▶ Stabilised fertilisers

Land use change

- ▶ Reforestation of marginal land
- ▶ Develop integrated shelterbelts



Source: How can Australia's agriculture sector realise opportunity in a low emissions future?, EY, 2021

Priority activities with a productivity, nature and carbon nexus

- ▶ Convert crop waste to energy
- ▶ Capture and reuse crop waste
- ▶ Increase fire management practices
- ▶ Optimise livestock management practices
- ▶ Planting of legume (N₂ fixing) crop species
- ▶ Retention of ground cover and stubble
- ▶ Optimise fertiliser, herbicide and pesticide use
- ▶ Optimise water management practices
- ▶ Protected areas of natural lands
- ▶ Enhancement of natural lands and connectivity
- ▶ Integrated pest management
- ▶ Integrated coastal zone management
- ▶ Ecosystem restoration, afforestation and reforestation

3. This estimation is based on the pathway prepared for Farmers for Climate Action. EY considers that more ambitious pathways exist for decarbonisation in the forestry and agriculture sectors, subject to political factors and technology developments

How can government support regional primary producers?

Achieving a low emission future, while protecting and enhancing the benefits that the agriculture sector provides, will require a coordinated effort and will ultimately foster the next generation of farmers delivering jobs and economic growth.

Government support	Coordinate efforts	Expand market	Invest in innovation
	<ul style="list-style-type: none">▶ Establishing partnerships across the sector▶ Cohesion across different industry bodies, geographies and commodities▶ Identifying synergies and co-benefits that exist across the sector▶ Sharing of cross sectoral knowledge	<ul style="list-style-type: none">▶ Continuing to develop and enhance Emission Reduction Fund (ERF) methodologies▶ Incentives that reward good management (both historical and future)▶ Recognise agribusinesses that achieve additional biodiversity or social co-benefits.	<ul style="list-style-type: none">▶ Investing in research and development▶ Financial incentives for farmers and communities investing in leading technologies or efficient farm practices▶ Building capability and skills to assist with on-farm adoption, extension and capacity building
	Income diversification	Productivity and market access	Long-term regional resilience
Benefits across industry	<ul style="list-style-type: none">▶ Income diversification through carbon and environmental markets▶ Australian produce differentiation and access to capital markets through carbon neutral, deforestation-free and organic products.	<ul style="list-style-type: none">▶ Healthier ecosystems through low-emission land management practices▶ Reliable food production systems and delivery of long-term value across agricultural supply chains.	<ul style="list-style-type: none">▶ Build industry-wide resilience against vulnerability to market forces, climate change and regulatory frameworks▶ Long-term socio-economic benefits for regional communities

ESG focus areas for the agriculture sector

1

**Climate risk
and other non-
financial
reporting**

2

**Decarbonisation
and scope 3
emissions**

3

**Biodiversity
and
natural capital**

4

**Circularity –
waste and
water**

5

**Human rights
and modern
slavery**

6


**Future of
reporting and
assurance**

Key challenges for primary producers

- ▶ Increasing pressure from investors and customers onto primary producers
- ▶ Multiple ESG-related frameworks
- ▶ Evolving regulatory demands, regulatory bodies and timelines
- ▶ Establishing internal processes to enable strategic decisions in the long run
- ▶ Complex ESG data management and collection
- ▶ Availability of data to support strategic decisions
- ▶ Rising expectations for trust and transparency
- ▶ Continuous monitoring and maturity of reporting frameworks

How organisations are preparing to respond?





Questions and discussion

Q&A

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