

NATURE WORKING GROUP



Responsible Investment
Association Australasia



Nature Working Group Minutes – Meeting #2

Meeting: Via Zoom – Thursday 16 June 2022, 12.00 to 1.30pm (AEST) 2.00pm to 3.30pm (NZDT)

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Attendees (80)

	First Name	Last Name	Company
1	Thomas	Abbott	Platypus Asset Management
2	Harry	Agnew	Perpetual Asset Management, Australia
3	Jess	Blake	EY
4	Craig	Blundell	Greville Analytics
5	Emily	Briggs	Pollination
6	Blathnaid	Byrne	CBA
7	Kay	Byrne	Crestone Wealth Management
8	Michelle	Cameron	Refinitiv
9	Miguel	Castillo	EY
10	Luke	Chalmers	EY
11	Alfred	Chang	Credit Suisse Management (Australia) Pty Ltd
12	Madeline	Combe	Altiorum
13	Lisa	Crowley	KPMG Australia
14	Emily	Davies	EY
15	Angelica	Del Hierro	KPMG Australia
16	Suwanee	Dharmalingam	Macquarie
17	Johannah	Dods	Accident Compensation Corporation
18	Maddy	Dwyer	Paradice
19	Supriya	Edwards	Macquarie Asset Management (NZ)
20	Chrissy	Elmer	Accounting for Nature
21	Romy	Faulkner	ACSI
22	Evonne	Grosso	Blue Pearl Consulting
23	Giles	Gunesekera	Global Impact Initiative
24	Theresa	Hoogland	Northern Trust Asset Management

25	Stephanie	Hukins	Schroders
26	Michaela	Jamison	Jarden
27	Aravinda	Jayaram	Red Point IM
28	Leah	Keys	Mercer (N.Z.) Limited
29	Tim	King	Melior Investment Management
30	Alexandra	Knight	EY
31	Tom	Lambert	Frontier Advisors
32	Eds	Lamdagan	Hyperion Asset Management Limited
33	Joanne	Lee	First Sentier Investors
34	Robyn	Leeson	STR Consulting
35	Ben	Lloyd	Castle Hall Diligence
36	Shara	Lohrasb	Clean Energy Finance Corporation
37	Mark	Lyster	Lyster & Associates
38	Rebecca	Mather	Mercer
39	Tom	Meysztowicz	KPMG Australia
40	Erica	Miles	West Nine Consulting Limited
41	Pepe	Morales	Morales Gwynne Pty Ltd
42	Soumya	Munagala	ISS ESG Australia
43	Greg	Munford	NZ Superfund
44	Elizabeth	O'Callaghan	QIC
45	Gael	Ogilvie	
46	Bianca	Olguin Malavisi	RIAA
47	Kaylene	Oneill	NAB
48	Julie	Orr	Australian Ethical
49	Estelle	Parker	RIAA
50	Lili	Pechey	NAB
51	Venn	Purnell	Active Super
52	Paul	Richardson	Carina Capital Limited
53	Amanda	Richman	Australian Ethical Investment
54	André	Roberts	Invesco
55	Linda	Romanovska	PwC
56	Trista	Rose	LSEG / FTSE Russell
57	Ummul	Ruthbah	Monash Centre for Financial Studies, Monash Univer
58	Emily	Ryan	Caused
59	Jo	Saleeba	New Forests
60	Matthew	Samuels	Woodbridge Capital
61	Andrew	Saunders	QIC
62	John	Simon	Gottstein Trust
63	Amelia	Slaytor	Crescent Capital Partners
64	Nigel	Stewart	Dimensional Fund Advisors
65	Kana	Thorpe	Duxton Capital Australia
66	Kim	Trieu	T. Rowe Price Australia
67	Meri	Vukasin	Ausbil Investment Management Limited
68	Liam	Walsh	ClimateWorks
69	Adrian	Ward	Accounting for Nature
70	Madelon	Willemssen	Minderoo Foundation - Fire & Flood Resilience Initiative
71	Anne-Sophie	Williams	BlackRock
72	Anne-Sophie	Williams	BlackRock

73	Sophie	Winsborough	EY
74	David	Woods	Toitu Tahua
75	William	Wu	Schroders
76	Jane	Wu	
77	Suzy	Yoon	JANA
78	Elle	Yudelman	Ethical Partners Funds Management
79	Rena	Zhu	EY
80	Romy	Zyngier	ClimateWorks Australia

Minutes

Item	Action	Delegation
Welcome – Shara Lohrasb (Co-Chair, CEFC) <ul style="list-style-type: none"> Welcome to new members Working Group Principles (see attachment 4) Acknowledgement of Country Motion to pass minutes from last meeting: Shara Lohrasb (Co-Chair, CEFC) Passed: Emily Davies (EY) Second: Gael Ogilvie 		
Special Presentation by Romy Zyngier, Senior Research Manager at ClimateWorks – Planetary boundaries report available here . Slides available in attachment 3 and recording available here . <ul style="list-style-type: none"> Planetary boundaries framework helps humans understand how to return to a ‘safe operating space’ and can help decision makers determine whether an investment or decision leads to a sustainable future/outcome. The framework accounts for 9 earth systems, with 5 already being assessed as being beyond the ‘safe operating zone’. Australia’s land-use sector contributes to significant degradation; however, it also holds opportunities for positive change such as waste management, conservation, and restoration of natural lands, and shifts in production. 	For more information, please contact Liam Walsh, Climateworks	All
Update on TNFD – Shara Lohrasb (Co-Chair, CEFC) Slides available in attachment 3 and recording available here . Three key new initiatives: <ol style="list-style-type: none"> TNFD have appointed six consultation groups to reach local networks: Australia and Aotearoa New Zealand, India, Japan, Netherlands, Switzerland, and the United Kingdom. Indigenous Peoples and local community engagement, in partnership with the IUCN. Pilot program partners. Feedback continues with V0.2 set to be released on June 28 th and V0.3 estimated to be released in October 2022.	For more information, please contact Guy Williams (Co-Chair, Deloitte)	
Aotearoa New Zealand update – Greg Munford (NZ Superfund) and Gael Ogilvie A group of RIAA Aotearoa New Zealand based members are working on two initiatives: <ol style="list-style-type: none"> Trying to connect the Ministry for the Environment (MFE) with 		

<p>Australia's equivalent to encourage collaboration.</p> <p>2. RIAA will be hosting a stakeholder workshop with the support of New Zealand Superfund on July 5th (3:30pm to 5:30pm NZST) with a focus on nature-related investment. This workshop will bring together key practitioners from various stakeholder groups (investment, banking, government, etc) to explore nature related risks and opportunities within Aotearoa. More information available here.</p>	<p>For more information, please contact Greg Munford (NZ Superfund) and Gael Ogilvie</p>	
<p>Update on RIAA – TNFD National Consultation Group– Estelle Parker (RIAA)</p> <p>RIAA is excited to be leading the TNFD National Consultation Group (NCG) for Australia and Aotearoa New Zealand. This opportunity reflects RIAA's leadership in the sector. The NCG will not impact the work of the working groups given that TNFD is only one of the NWG's objectives.</p>	<p>For more info, please contact Estelle Parker (RIAA)</p>	
<p>Global Biodiversity Framework – Shara Lohrasb (Co-Chair, CEFC)</p> <p>See attachment 3</p> <p>COP15 conference will convene governments from around the world to agree to a new set of goals for nature over the next decade and will look at the implementation of the protocols of the convention on biological diversity.</p> <p>The Global Biodiversity Framework is broken down into targets and goals for both 2030 and 2050 to halt extinctions and biodiversity loss. For example, one target is to reduce the extinction rate by a quarter.</p> <p>For more information please see here.</p>	<p>For more information, please contact Shara Lohrasb (Co-Chair CEFC)</p>	
<p>Subgroup Updates</p> <p>Subgroup 1 – Awareness and Education for Investors - Emily Davies (EY) - please see slides in attachment 4</p> <p>The first two Nature in a Nutshell facts sheets are now available, the first topic is Natural Capital and the second topic is the TNFD. Please see attachment 1 and 2 for the final versions.</p> <p>Nature Working Group Survey result summary available in slides.</p> <p>Subgroup 2 – Nature Related Risks and Exposures - Tim King (Melior)</p> <p>The subgroup will seek to work with 3-5 companies who are interested in trialling the TNFD's LEAP framework (focusing primarily on the L and E). A research proposal has been prepared which outlines the LEAP framework to help companies start thinking about how they can start reporting on the TNFD. Suggestions for companies are welcomed.</p> <p>Subgroup 3 – Activating Nature-related Investment Opportunities - Jo Saleeba (New Forests) – please see form here. The form closes on July 31st 2022.</p> <p>Two main tasks:</p> <ol style="list-style-type: none"> 1. A compendium of financially feasible nature positive investment case studies. A form has been prepared to collect suggestions for a case study. 2. A report on natural capital and sustainable finance frameworks globally – seeking to investigate how successfully these frameworks are incentivising investment in a nature positive manner and how they can be best implemented in Australia and Aotearoa. 	<p>For more info, please contact Emily Davies (EY)</p> <p>For more info, please contact Tim King (Melior) and Claire Molinari (Care Super)</p> <p>For more info, please contact Jo Saleeba (New Forests) and Linda Romanovska (PwC)</p>	

<p>Subgroup 4 – Strategy and Systems – Michelle Cameron (Refinitiv) and Gael Ogilvie</p> <p>Two main outcomes:</p> <ol style="list-style-type: none"> 1. A systems diagram that intends to capture at a high-level impacts, risks and opportunities and interdependencies. The diagram is currently being reviewed. 2. A Participant list: a draft has been prepared of a participant table that includes primary stakeholders (including Governments, regulators, Research and Science, Industry associations, NGO's, First Nations). This list will include participants from both Australia and Aotearoa. <p>Subgroup 5 – Corporate Engagement - Amanda Richman (Australian Ethical) and Evonne Grosso – please see slides in attachment 5</p> <p>This newly created subgroup aims to uncover how the responsible investment sector can help drive positive change. This subgroup will be closely following the work of Nature100.</p> <p>External Reference Group - Blàthnaid Byrne (CBA)</p> <p>The external reference group is reviewing the current NWG workplan. A lunch time session will be hosted shortly focusing on what a good nature-focused investment looks like.</p>	<p>For more info, please contact Michelle Cameron (Refinitiv) and Gael Ogilvie</p> <p>Please contact Amanda Richman (Australian Ethical) and Evonne Grosso</p> <p>For more info, please contact Blàthnaid Byrne (CBA) and Jane Hutchinson (Pollination)</p>	
<p>Review FY22 / approve FY23 Workplan update</p> <p>The workplan was approved by the working group. Please see workplan in attachment 3.</p>		
<p>Other Industry updates and collaborations</p> <p>Altioirem – Maddy Combe (Altioirem)</p> <p>Altioirem is one of the world's first online, community built, sustainable finance libraries. The community is made up of many student volunteers and mentors. Members are able to become mentors and even co-author articles. For more information please see here, and those interested in registering as a volunteer can do so here.</p> <p>Lock the Gate update - Mark Lyster (Lock the Gate)</p> <p>In the lead up to Origin's "Say on Climate" AGM resolution in October, Lock the Gate has engaged over 50 investors on Origin's impacts and risks of Origin's proposed new unconventional gas developments in the Beetaloo, Canning and Cooper basins. Recent research by The Australia Institute indicates that the emissions from these basins could be more than 2 % of the global carbon budget (8 bil tCO2e over 20 years) and similar to Australia's total emissions on an annual basis (450 mil tCO2e pa) - see Lock the Gate's message to shareholders and Origin's climate wars report here.</p>	<p>For more information please contact Maddy Combe (Altioirem)</p> <p>For more information please contact Mark Lyster</p>	
<p>Next Meeting – September 15 – please register here</p>		

Action Register

Number	Action	Delegation	Status
New			
22-22	Next Meeting – September 15 – please register here	All	Pending
21-22	For more information on Lock the Gate please contact Mark Lyster	All	Pending

20-22	To become a mentor with Altioirem please contact Maddy Combe (Altioirem)	All	Pending
19-22	To join the external reference group Blàthnaid Byrne (CBA) and Jane Hutchinson (Pollination)	All	Pending
18-22	To participate in Subgroup 5 please contact Amanda Richman (Australian Ethical) and Evyonne Grosso	All	Pending
17-22	To participate in Subgroup 4 please contact Michelle Cameron (Refinitiv) and Gael Ogilvie	All	Pending
16-22	To participate in Subgroup 3 please contact Jo Saleeba (New Forests) and Linda Romanovska (PwC)	All	Pending
15-22	To participate in Subgroup 2 please contact Tim King (Melior) and Claire Molinari (Care Super)	All	Pending
14-22	To participate in Subgroup 1 please contact Emily Davies (EY)	All	Pending
13-22	For more information on the Global biodiversity framework please contact Shara Lohrasb (Co-Chair CEFC)	All	Pending
12-22	For more information on the TNFD National Consultation Group, please contact Estelle Parker (RIAA)	All	Pending
11-22	To connect with Aotearoa-based WG members, please contact Greg Munford (NZ Superfund) and Gael Ogilvie	All	Pending
10-22	For more information on the TNFD, please contact Guy Williams (Co-Chair, Deloitte)	All	Pending
9-22	For more information on planetary boundaries, please contact Liam Walsh, Climateworks	All	Pending
Previous			
8-22	Register for next meeting - register here	All	Pending
7-22	ACF and COP 15 - For further information please contact Nathaniel Pelle (ACF)	All	Pending
6-22	Please contact Amanda Richman (Australian Ethical) regarding the subgroup.	All	Pending
5-22	NiN - For further info please get in touch with Emily Davies (EY)	All	Pending
4-22	Please get in touch with Min Wah Voon (RIAA) regarding the workplan	All	Pending
3-22	Member portal - Feedback is welcomed	All	Pending
2-22	For more information, please contact Nicole Yazbek-Martin (DAWE)	All	Pending
1-22	For more TNFD related information please contact Guy Williams (Deloitte) or Carolyn Leeshaa (KPMG)	All	Pending
Previous			
28-21	Members are encouraged to register for all 2022 meetings	All	Pending
27-21	For more information and meeting notes please contact Lily Stuart (FAIRR)	All	Pending
26-21	Members can contact Amanda Richman for further information	All	Pending
25-21	Questions regarding NSW circular economy and the report by ITK can contact Min Wah Voon (RIAA)	All	Pending
24-21	For more information, please contact Madeleine Combe	All	Pending
23-21	Members are encouraged to contact Jane Hutchinson (Pollination) for further information.	All	Pending
22-21	Members are encouraged to contact Alex Banks (EY)	All	Pending
21-21	Members are encouraged to share their suggestions with the Shara Lohrasb (CEFC), Guy Williams (Deloitte) and Min Wah Voon (RIAA)	All	Pending
20-21	Members are encouraged to get in touch with April McKenzie and Jack Bisset (XRB)	All	Pending

19-21	Members are encouraged to get in touch with Carolyn Leeshaa (KPMG) or Guy Williams (Deloitte)	All	Pending
18-21	Members are encouraged to contact Liam Walsh directly	All	Pending
17-21	Members are encouraged to get in touch with Simon O'Connor with follow up questions	All	Pending
16-21	Our next meeting will be on the 7 th of December – you can register here	All	Done
15-21	Register and attend Pollination Natural Capital and Nature Risk 'Lunch and Learn' Series, in collaboration with RIAA and IUCN . Webinar 4, on 27 October, will address: the “Next Steps” on natural capital and natural risk.	All	Done
14-21	Members who are interested in partnering with RIAA for the Nature WG please get in touch with Min Wah Voon .	All	Done
13-21	Please contact the Co-Chairs, Bianca (RIAA) and/or the subgroup leads directly to join a subgroup and/or leadership group meeting.	All	Pending
12-21	Members who are interested in TNFD please get in touch with Guy Williams or Scott Mesley	All	Pending
11-21	Co-develop workplan at the next Leadership group meeting on Thursday 2 September	Leadership Members	Done
10-21	Organise the selection of two Co-Chairs at the next Leadership group meeting on Thursday 2 September (Min Wah).	RIAA	Done
9-21	Attend Pollination Natural Capital and Nature Risk 'Lunch and Learn' Series, in collaboration with RIAA and IUCN	All	Done
8-21	Contact Min Wah (RIAA) with any ideas and suggestions.	All	Ongoing
7-21	Send Min Wah your breakout room discussion points.	All	Completed
6-21	If you would like to nominate to be a Co-Chair, please email Min Wah an email with 300 word (max) statement on why you (as an individual) and your organization should be considered for the role by Monday 30 August.	All	Completed
5-21	If your organisation may be interested to become a Principal Partner, Group Sponsor and/or Leadership Member of the Nature Working Group, please contact Min Wah (RIAA)	All	Ongoing
4-21	Contact Greg Munford at NZ Super who will facilitate an initial discussion to complement this working group.	Aotearoa NZ members	Pending
3-21	Consider joining the TNFD Stakeholder Group and/or becoming involved in a Technical Working Group (see instructions in notes).	All	Ongoing
2-21	Review and consider recommended next steps shared by: i) Andrew Mitchell, ii) Carolyn Leesha	All	Ongoing
1-21	Register for next two meetings	All	

NATURAL CAPITAL, ECOSYSTEM SERVICES AND NATURE-BASED SOLUTIONS

Nature's conservation is essential to maintaining the systems and processes that support life on Earth. In an effort to conceptualise nature's value from an economic perspective, the terms natural capital, ecosystem services, and nature-based solutions have begun to permeate the contemporary discourse.

To help investors navigate and employ these increasingly mainstream, and too often conflated, terms, we have put together this summary explaining what they mean and their relevance to the investment community.



Figure 1 – relationship between natural capital, ecosystem services & nature-based solutions

NATURAL CAPITAL

- **Natural capital** (or 'natural assets') is the stock of renewable and non-renewable resources that combine to yield a flow of benefits (ecosystem services) to people. Natural capital comprises two main components: abiotic (non-living) and biotic (living).
- These living and non-living components can include both **individual assets** like minerals, fungi, CO₂, plants and **assets produced through the interaction of these individual components** like clean air, arable land, forests, ecosystems, and biodiversity.
- Natural capital is conceptually similar to other forms of capital like social capital, human capital, financial capital, and manufactured capital: **they are all inputs into economic production.**

- The value of natural capital is determined by its capacity to support and enhance economic production through the goods and services it provides.
- These goods and services are collectively known as ecosystem services.

In a Nutshell: Natural capital accounting

Natural capital accounting is an umbrella term used to describe the process of calculating (in economic terms) the total 'stock' of natural capital in a given location. These calculations are performed using a framework of economic and environmental data called the **System of Environmental and Economic Accounts** (SEEA), approved by the United Nations Statistical Commission.

*As of 2017, the Australian Bureau of Statistics estimated the total stock of Australia's natural capital to be **AU\$6.4 trillion** per year*

ECOSYSTEM SERVICES

Ecosystem services are the services produced by **natural capital** and their **interactions**.

- Ecosystem services describe the naturally occurring biological processes that facilitate life and deliver vital services such as pollination, climate regulation, food production and water filtration.
- For example, bees interacting with plants to provide us with pollination, or mangroves protecting coastal communities from storm damage.

The four categories of ecosystem services are:

1. **Provisioning services** - raw materials such as timber and fish
2. **Regulating services** - climate regulation by algae producing oxygen
3. **Cultural services** - aesthetic value, Indigenous heritage value and tourism value
4. **Supporting services** - waste absorption, nutrient cycling, and decomposition

In a nutshell: The state of natural capital and ecosystem services

- As of 2011, the global value of ecosystem services was estimated to be **US\$125-145 trillion/yr**
- Between 1992-2014 we lost approximately 40% of the natural capital that underpins these services
- Today, ecosystem services are declining at a rate of **US\$5 trillion/yr**
- More than half the world's GDP, or **US\$44 trillion** is classified as moderately to highly dependent on nature
- This rapid decline is generating significant sources of financially material risk for those sectors most exposed, such as **agriculture, food & beverage, and construction**

NATURE-BASED SOLUTIONS

Nature-based solutions are defined by the International Union for Conservation on Nature (IUCN) as "...actions to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits".

They include:

- Biological carbon sequestration
- Coastal/aquatic management
- Land/forest restoration

Nature-based solutions are being implemented across the globe to address some of the most significant [socio-environmental challenges](#) of our time (like climate change!). More recently, [organisations are implementing nature-based solutions](#) in an effort to protect and enhance the ecosystem services on which their businesses operations are dependent.

In a nutshell: Drivers of biodiversity loss and ecosystem change

- In its simplest of terms, biodiversity is the [richness of life on Earth](#); the living component of natural capital and ecosystem services (plants, animals, fungi and bacteria).
- Ecosystems with high levels of biodiversity produce more ecosystem services (because they are richer in natural capital), and are more resilient than non-diverse ecosystems.
- By protecting and enhancing biodiversity (such as through employing nature-based solutions), we are safeguarding the stock of natural capital for future generations.
- Drivers of biodiversity loss can be [direct or indirect](#). Key direct drivers include invasive species, land/sea use change, pollution, climate change, and the direct exploitation of organisms.
- Indirect drivers often influence direct drivers, for example, demographic change might result in increased meat consumption, which may in turn lead to land clearing and deforestation for cattle grazing. This relationship is illustrated in *figure 2* below.

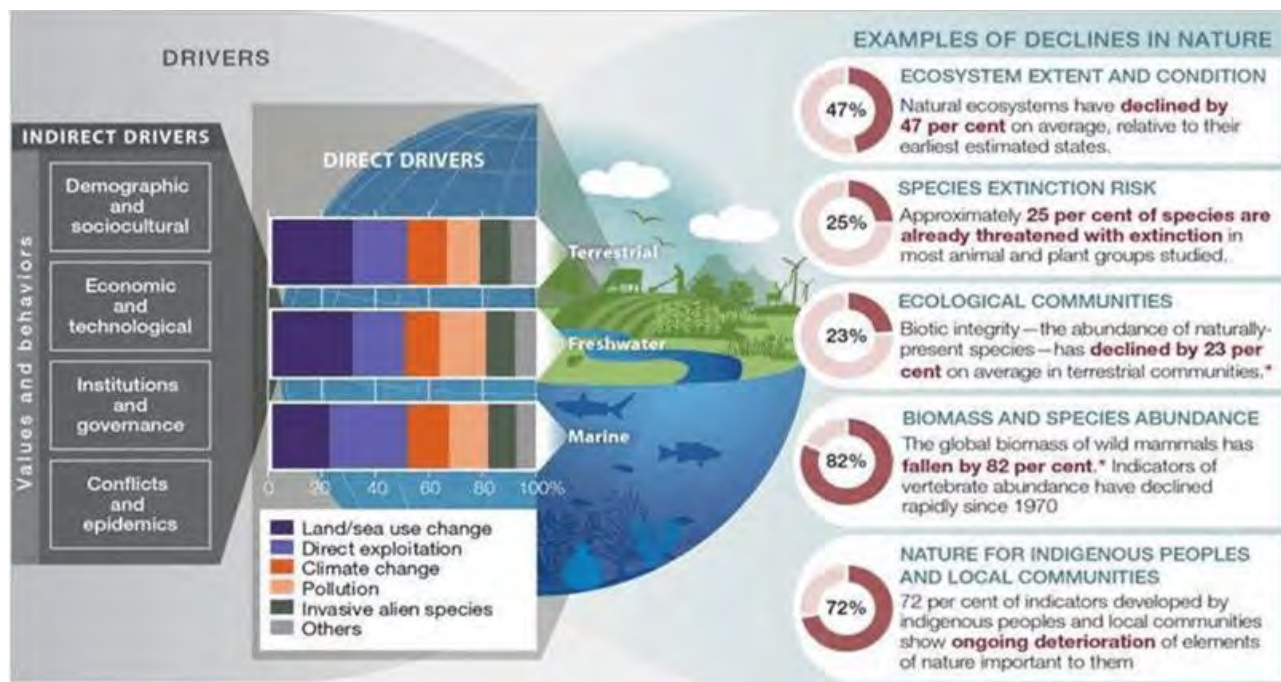


Figure 2: Infographic found in the [Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services \(IPBES\)](#) summary paper for policymakers of the global assessment report on biodiversity and ecosystem services. Figure illustrates the relationship between indirect and direct drivers of ecosystem change, leading to the degradation and loss of biodiversity and other natural assets (see key statistics on the right) that generate ecosystem services.

INVESTOR RELEVANCE - RISK

Investors are exposed to risk through the [companies in their portfolios](#). Based on the dependencies and impacts of those companies on ecosystem services, financially material risks may arise if those ecosystem services are compromised. This risk can be:

- **Physical** - e.g. a physical asset destroyed by a storm
- **Transition** - e.g. bans on products that harm nature, leading to new product innovation
- **Systemic** - e.g. deforestation leading to reduced rainfall, thus impacting the agricultural industry

1. Natural capital produces ecosystem services	5. This vulnerability flows through to investors who have a financial stake in exposed companies, manifesting in: 1. Credit risk 2. Reduced liquidity 3. Market risk 4. Raised insurance premiums 5. Investment and capital costs 6. Reduced business model
2. Companies are highly dependent on ecosystem services	
3. When natural capital is damaged/destroyed, ecosystem services are compromised	
4. When ecosystem services are compromised, these companies become vulnerable to financial losses through the key risk pathways outlined above	

Figure 3: Summary table illustrating how natural capital and ecosystem services are relevant from a risk perspective, with risks manifesting in [six main ways](#) for investors.

INVESTOR RELEVANCE - OPPORTUNITY

[The World Economic Forum](#) (WEF) notes that key transitions towards a nature-positive economy in three socio-economic sectors alone (food, land & ocean, infrastructure & built environment, energy & extractives) could yield US\$10 trillion in business opportunities and 395 million jobs by 2030.

Capturing this opportunity is forecasted to require **\$2.7 trillion in investment**. This investment capital will need to flow into:

- **Emerging markets** where dependency on natural capital is high and governance is lacking
- **New technologies** that support the transition to a nature-positive economy
- **Companies reporting** their nature-related risk and impacts
- **Companies implementing** sustainable practices and technologies
- **Financial instruments** with nature positive outcomes

INVESTOR ACTION - CAUSE

For investors looking to take the next step, here are five key actions (CAUSE):

1. **Collaborate** with global and local initiatives
2. **Advocate** for your institutions to act on more nature conservation activities
3. **Use** sustainable investment techniques
4. **Shift** investments into sustainability focused industries or assets
5. **Educate** yourself

RECOMMENDED READINGS AND INITIATIVES

Biodiversity, natural capital, ecosystem services & nature-based solutions

- [The Biodiversity Crisis is a Business Crisis](#)
- [Corporate Natural Capital Accounting](#)
- [Natural Capital Protocol: Business Primer](#)
- [Exploring Natural Capital Risks, Opportunities & Exposures](#)
- [Biodiversity: Unlocking Natural Capital Value for Australian Investors](#)
- [World Bank: Mobilising Private Finance for Biodiversity & Ecosystem Services](#)
- [IUCN Work on NBS and Ecosystem Services](#)
- [Market Review Of Nature-Based Solutions Ecosystem Services: Key Concepts and Applications \(AU Gov\)](#)

New Zealand context

- [Ecosystem Services and New Zealand's Wellbeing](#)
- [New Zealand Institute for Economic Research: Capturing Natural Capital in Decision Making](#)
- [Sustainable Business Council: Corporate Ecosystem Services Review - Case Studies & Insights](#)
- [The Total Economic Value of New Zealand's Land Based Ecosystems and Their Services](#)

Tools & initiatives

- [Capitals Coalition](#)
- [ENCORE](#)
- [Natural Capital Finance Alliance \(NCFA\)](#)
- [Nature-Based Solutions Initiative \(information and case studies\)](#)
- [Taskforce on Nature-related Financial Disclosures \(TNFD\)](#)
- [Finance for Biodiversity Initiative: Aligning Global Finance with Nature's Needs - A Framework for Systemic Change](#)
- [Finance for Biodiversity Foundation Overview of Initiatives \(17 initiatives featured here!\)](#)

Other readings

- [Little Book of Investing in Nature](#)
- [WEF New Nature Economy Report II: Nature Risk Rising](#)
- [PRI: Investor Action on Biodiversity Discussion Paper](#)
- [Financing Nature: Closing the Global Biodiversity Funding Gap, Executive Summary \(Paulson Institute\)](#)
- [Nature Conservancy: Investing In Nature Report](#)

This fact sheet was produced by Fiona Huynh and Madeleine Combe, Altioirem, with support from Emily Davies and Jessica Blake, EY.

TASKFORCE FOR NATURE-RELATED FINANCIAL DISCLOSURES (TNFD) CHEAT SHEET

The introduction of the TNFD framework is vital in enabling market-led change in how financial risk identification and management are reported, as well as creating positive outcomes for nature and economic stability.

This summary helps support investor understanding of, and preparedness for, the TNFD by providing a summary of the framework and key information related to the TNFD and its objectives.

TNFD PURPOSE & IMPORTANCE

[The TNFD](#) is essentially an international cross sector, business-backed initiative aimed at addressing nature-related risks and opportunities.

Drafted by 34 senior executives from corporations, financial institutions and service providers, the [mission and goals](#) of the TNFD are as follows:

Mission

- To develop & deliver a risk management and disclosure framework that will allow organisations to report and act on nature-related risks.

Goals

- To support a shift in global financial flows away from nature-negative outcomes and toward nature-positive outcomes.
- To promote worldwide consistency for nature-related reporting.

The importance of this initiative is widely evidenced. For example, [BlackRock](#), one of the world's largest asset managers, has indicated it will not endorse the re-election of board directors if companies have not 'effectively managed, overseen or disclosed' risks associated with nature loss.

'The creation of a TNFD is hugely important as it will lead to new ways of identifying, valuing and reporting on nature-related risks, as well as identifying new economic opportunities to protect and restore the natural world on which we depend.'

[Andrew Mitchell](#), a Founder and Senior Advisor to Global Canopy

'Biodiversity finance is the new frontier of green finance... We are convinced that the work of the Taskforce on Nature-related Finance Disclosures will accelerate the understanding of these issues and will ultimately lead to both a reduction in financial flows and economic activities that are harmful to biodiversity and a massive redirection of flows towards activities that are favourable to biodiversity.'

[Bérangère Abba](#), French Secretary of State

TNFD ALLIANCE

As of March 2022, the [TNFD Alliance](#) is comprised of:

1. **Co-Chairs** – David Craig, Elizabeth Maruma Merema
2. **Taskforce Members** – Senior executives from financial institutions, corporates and market service providers managing US\$18.3 trillion AUM
3. **TNFD Forum** – 300+ members from a broad range of institutional types including public sector, academics, business associations, and financial institutions that offer consultative support
4. **Secretariat** – currently hosted by the Green Finance Institute
5. **Stewardship Council** – the 12 founding members & funding partners of the TNFD

TNFD PRINCIPLES

The TNFD is guided by the following [seven principles](#):

1. **Market usability** – develop frameworks useful/valuable to market reporters, users & policy makers
2. **Science-based** – incorporate well established, scientific evidence
3. **Nature-related risks** – incorporate both dependencies on nature and impacts to nature
4. **Purpose-driven** – actively target reducing risks and increasing positive outcomes
5. **Integrated and adaptive** – align with existing frameworks and adapt to future developments
6. **Climate-nature nexus** – employ an integrated approach & scale finance for nature-based solutions
7. **Globally inclusive** – ensure the framework is relevant, just, valuable, accessible, and affordable worldwide

TNFD END USERS

The TNFD framework is designed for the following user types ([p19 TNFD Beta Framework](#)):

- Investors & financial institutions
- Analysts
- Corporates
- Regulators
- Rating agencies & data providers
- Central banks
- Stock exchanges
- Accounting firms

According to the World Economic Forum [New Nature Report II](#), half the world's GDP is moderately to highly dependent on nature. In allowing us to measure, monitor and manage our financial dependencies and impacts on nature, the TNFD will enable users to prepare for what will be the most important topic for investors in the coming decades.

Please note that whilst the framework is targeted at the above organisations, all financial institutions and companies are invited to contribute to the framework's development through pilot testing and other [participation pathways](#).

TNFD STRUCTURE

The Beta Framework will include three core components: key concepts & definitions, recommended disclosures, and guidance for users. The recommended disclosures are organised into four key pillars ([p47 TNFD Beta Framework](#)). These are:

1. **Governance** – disclose the organisation's governance around nature-related risks & opportunities.
2. **Strategy** – disclose the actual and potential impacts of nature-related risks and opportunities on the organisation's businesses, strategy and financial planning where such information is material.
3. **Metrics & targets** – disclose how the organisation identifies, assesses and manages nature-related risks.
4. **Risk management** – disclose the metrics and targets used to assess and manage relevant nature-related risks and opportunities where such information is material.

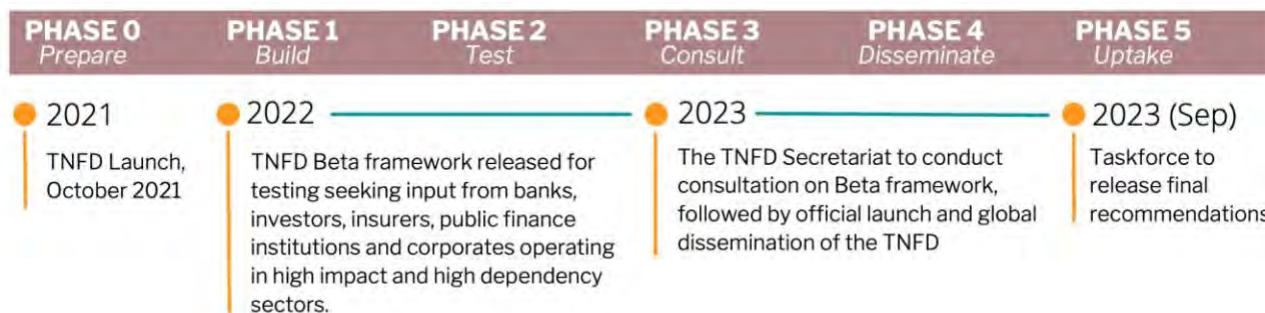
TNFD SCOPE

The TNFD will cover both nature-related risks (dependencies and impacts) and opportunities. Some key notes on the scope are highlighted below ([p4 'Nature in Scope'](#)):

- **The TNFD is focused on living nature** and related elements such as air, soil and water.
- In addition to shorter-term financial risks, **the TNFD includes longer-term risks** represented by its impact and dependencies on nature.
- **The TNFD is not a new standard**; it integrates existing initiatives, tools and materials linked to nature-related risks and opportunities, such as the Global Reporting Initiative (GRI), Sustainable Accounting Standards Board (SASB), Climate Disclosure Standards Board (CDSB), and International Financial Reporting Standards (IFRS).
- **The TNFD seeks to align with the UN Convention on Biological Diversity's (CBD)** zero-draft Global Biodiversity Framework of no net loss of Nature by 2030 and net gain by 2050.
- **The TNFD framework is intended for use globally** by corporates and financial institutions of all sizes.

TNFD PHASES & TIMELINE

The TNFD will be rolled out in a staged approach, with each stage increasing in sophistication to enable organisations to align themselves progressively with the framework. Below is a summary of the key [phases and timeline](#) for the roll-out and testing of the TNFD Beta Frameworks.



[Beta Framework](#) released for testing from March 2022 – September 2023

TNFD OUTPUTS

The TNFD will seek to deliver the following ([p11 TNFD Scoping paper](#)):

1. Series of definitions concerning nature-related risks and opportunities
2. A stakeholder landscape assessment
3. A set of principles to help users understand how to adapt the TNFD framework to the context of their organisation
4. A classification system for nature-related risks and opportunities by industry
5. An integrated nature-related risk and opportunity assessment process, called [LEAP \(Locate, Evaluate, Assess, Prepare\)](#).
6. A staged framework for disclosure
7. Detailed implementation guidance
8. Piloting opportunities

Below is a snapshot of the LEAP assessment according to the four key stages: [Locate](#), [Evaluate](#), [Assess](#), [Prepare](#). According to its authors, the LEAP approach reflects ‘...voluntary guidance intended to support internal, nature-related risk and opportunity assessments within corporates and financial institutions to inform strategy, governance, capital allocation and risk management decisions, including disclosure decisions consistent with the TNFD’s draft disclosure recommendations.’

LOCATE YOUR INTERFACE WITH NATURE	EVALUATE YOUR DEPENDENCIES AND IMPACTS	ASSESS YOUR RISKS AND OPPORTUNITIES	PREPARE TO RESPOND TO NATURE-RELATED RISKS AND OPPORTUNITIES AND REPORT
Size and scope of impacts/dependencies will be location specific	Identify locations where dependencies are critical and impacts are substantial will help prioritise and focus evaluation	Building on the impact analysis done in the 'Evaluate' phase, identify how impacts translate into risks for organisations	Analysts should now ready themselves to provide an integrated assessment of material nature-related risks/opportunities to company executives.

TNFD – HOW TO PREPARE

To prepare for the TNFD, investors, financial institutions, asset managers and corporates are encouraged to do the following:

1. **Proactively** start identifying their short, medium, and long-term exposure to nature-related risks in their current value chains and portfolios.
2. Consider appropriate nature-related metrics, targets, and internal reporting mechanisms.
3. Start engaging boards of companies to understand how nature-related risk will affect their firm's business and operations.
4. Get acquainted with the prototype LEAP approach, and the extended LEAP-FI for Financial Institutions ([p56-65 of the Beta Framework](#)).
5. Check your resource availability and consider pilot testing the [TNFD/ LEAP framework](#) and submitting a case study.

TNFD VS TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD)

The [TCFD](#) was created in 2015 by the Financial Stability Board (FSB) to develop consistent climate-related financial risk disclosures for use by companies, banks, and investors in providing information to stakeholders. It is important to recognise the distinctions between the TCFD and the TNFD. [Some key differences are as follows:](#)

- The TNFD covers risks such as nature-related risks, pollution, soil fertility and pathogens, while the TCFD covers climate-related physical and transition risks.
- The TNFD will incorporate double materiality into its framework. The TNFD will require organisations to report on their impact and dependency on nature, whereas the TCFD is focused on dependency-related risks alone.
- The TCFD developed its recommendations based on the 2015 Paris Agreement and the goal of capping global warming at 1.5°C, but there is no equivalent, simple metric for TNFD to anchor itself in.
- By complementing the TCFD, the TNFD will allow adopters to frame nature loss and climate change through a 'twin crisis' lens as the two are strongly interlinked.

TNFD CHALLENGES

In adopting the TNFD there are several challenges related to the inherent complexity of nature that warrant consideration:

- The TNFD is complex, [because nature is complex](#).
- There is **no clear metric to align with** like climate change's cap of 1.5°C of warming.
- Once the TNFD has been adopted, the solutions available to reduce identified impacts and dependencies are **not as accessible or mature** as for climate change.
- **Not all nature is born equal:** the way nature-related risks and impacts are considered is very geo-specific. A square metre of forest in Darwin is not the same as a square metre of forest anywhere else in the world. This makes managing impacts more difficult and nuanced.
- We aren't as well practiced at **disclosing nature-related risks & impacts** as we are climate change.

TNFD KEY DEFINITIONS

- **Nature** – the natural world, with an emphasis on the diversity of living organisms and their interactions
- **Impacts** – positive or negative contributions of a company or other actor toward the state of nature
- **Dependencies** – aspects of nature’s contributions to people that a person or organisation relies on to function
- **Nature-related risks & opportunities** – all financial risks and opportunities to the organisation as a result of impacts and/or dependencies on nature

A glossary of key terms used throughout TNFD resources can be found [here](#).

TNFD REFERENCES & RECOMMENDED READINGS

On the TNFD

- [Stakeholder engagement plan, WWF](#)
- [UNEPFI on the TNFD, comments from informal working group](#)
- [Speech by Sylvie Goulard, Green Swan Conference \(2021\)](#)
- [TNFD Beta Framework \(2022\)](#)
- [TNFD Scoping Paper \(2021\)](#)
- [KPMG Natural Capital Insights, TNFD](#)
- [South Pole: TNFD opinion piece](#)
- [Create a free account here and access the interactive, online TNFD portal](#)
- [TNFD resources](#)

On nature-related disclosures

- [UNEPFI - Are you ready for Nature-Related Disclosure? An Assessment of Readiness and Expectations from the Corporate Market](#)
- [UNEPFI - Prioritising Nature-Related Disclosures: Considerations for High-Risk Sectors](#)
- [CISL - Integrating Nature: The Case Study for Action on Nature-Related Financial Risks](#)
- [EU B@B - Assessment of Biodiversity Measurement Approaches for Businesses and Financial Institutions](#)

This fact sheet was produced by Fergus Nelson and Madeleine Combe, Altiolem, with support from Emily Davies and Jessica Blake, EY.

RIAA's Nature Working Group

Thursday 16 June

Principal Partner

Deloitte.



Responsible Investment
Association Australasia



Co-Chairs of RIAA's Nature Working Group



Shara Lohrasb, Associate Director at the Clean Energy Finance Corporation



Guy Williams, Director (Biodiversity and Natural Capital) at Deloitte

Principles of Participation

- Confidentiality - Chatham House Rule
- No self-promotion
- Declaration of conflicts of interest
- Representation
- Collaboration between members
- Positive change in practice/policy
- Not to engage in or discuss competitively sensitive information
- Apolitical

Special Presentation



Liam Walsh, Food, Land and Oceans System Lead at ClimateWorks



Romy Zyngier, Senior Research Manager at ClimateWorks

Living within limits: Adapting the planetary boundaries to understand Australia's contribution to planetary health

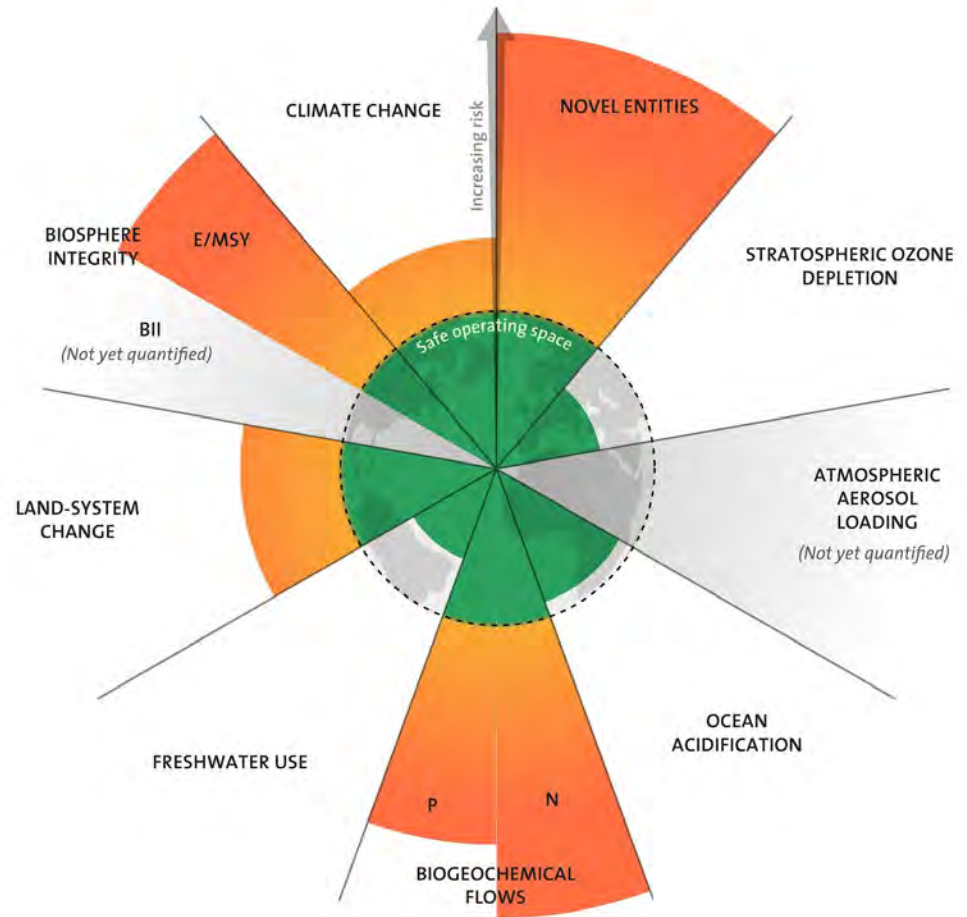
Dr Romy Zyngier

Senior Research Manager, Climateworks Centre



The planetary boundaries framework

Rockstrom et al., 2009 & Steffen et al., 2015



(Image: SRI, 2022)

National limits for Australia

Australia has transgressed three boundaries:

- + Biodiversity
- + Land-system change
- + Nitrogen and phosphorus flows

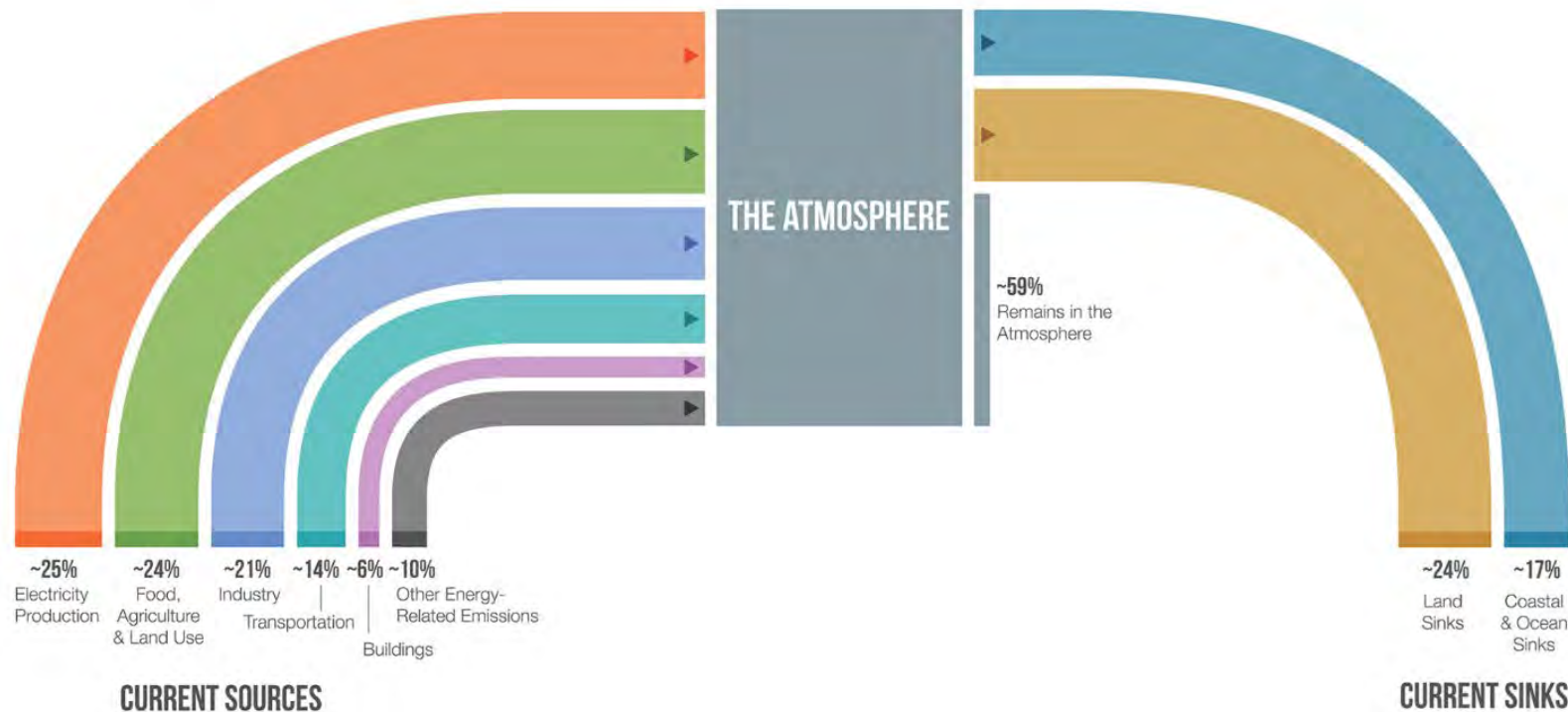
It is approaching national limits for:

- + Climate change
- + Freshwater use.

NATIONAL LIMITS FOR AUSTRALIA



EMISSIONS SOURCES & NATURAL SINKS



PROJECT
DRAWDOWN

Copyright © 2020, Project Drawdown

Source: IPCC (2014) & Global Carbon Project (2019)

Climate change boundary



GLOBAL BOUNDARY:



NATIONAL LIMIT FOR AUSTRALIA:



LAND USE SECTOR:

Trajectory of land use sector emissions are not on track to support the national limit for Australian emissions.

- + Globally, the climate change boundary has been transgressed.
- + Within 4 to 9 years Australia will have exceeded its emissions budget to limit warming to 1.5 °C.
- + The Australian land use sector needs to radically reduce emissions
- + The land use sector holds many solutions to support climate action.

Biosphere integrity boundary – biodiversity loss and extinction



GLOBAL BOUNDARY:



NATIONAL LIMIT FOR
AUSTRALIA:



LAND USE SECTOR:

The land use sector is a key driver
of Australia's biodiversity loss
and extinction.

- + Globally, the biodiversity boundary has been transgressed.
- + Australia is a biodiversity loss hotspot
- + Australia has highly elevated extinction rates
- + Climate change, land use and land use change have greatly reduced the available space for species

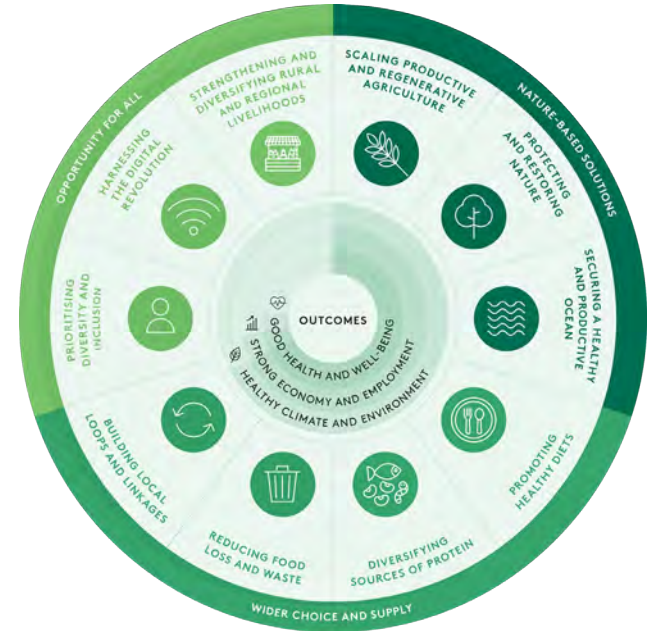
Biosphere integrity boundary – biodiversity loss and extinction



- + Australia's modern day extinction rates are many orders of magnitude greater than what would occur naturally:
 - + Mammals 430 x
 - + Birds 51 x
 - + Reptiles 12 x
 - + Amphibians 66 x
 - + Terrestrial plants 45 x
- + The loss of biodiversity has serious implications for environmental and human health, and the availability of critical ecosystem services
- + Approximately 23% of Australia's ecosystems exceed the disturbance threshold and a further 21% are approaching this threshold (using the International Union for Conservation of Nature classification of threatened).

What can we do?

- + There are existing solutions to turn these trends around - investment and finance have a key role to play
- + Setting science-based targets or limits is critical
- + The project is one example of setting limits, and demonstrates the importance of measuring at the right scales
- + Staying within limits will support a safe future for humans and the environment



Workplan FY 2022-2023

Phase	Activity	Timeframe
1. Exploration	RIAA Member Survey	Complete
	Establish Subgroups	Complete
	Establish external reference group	Complete
	Deloitte-RIAA-ASFI TNFD beta framework session	On going
	RI Australia 2022 conference - panel session	Complete
	Aotearoa NZ stakeholder workshop	On going
	Subgroup 4 - systems and stakeholder maps	On going
	Subgroup 4 - First Nations engagement	On going
	Subgroup 5 - corporate engagement	On going
2. Development	NWG one-pager - Who We Are	Complete
	Subgroup 1 - Nature in a Nutshell series (2 per quarter)	On going
	Subgroup 1 - Masterclass series	On going

Workplan FY 2022-2023 cont.

Phase	Activity	Timeframe
3. Doing	Subgroup 2 - Research to test TNFD beta with companies	On going
	Subgroup 3 - Compendium of investible cases	On going
	Subgroup 3 - Incentivising frameworks	On going
	TNFD version updates (knowledge-sharing)	On going
	Establish TNFD National Consultation Group	Pending
	External reference group - joint case study	On going
	Policy and advocacy - State of Environment report	Pending
	Policy and advocacy - TBD - Input into CBD COP 15	Pending
	Policy and advocacy - Samuels Review - TBD	Pending
4. Release	NWG report to coincide with release of TNFD	Pending

Upcoming meeting dates

Nature Positive Investment Aotearoa:

Stakeholder Workshop

Tuesday 5 July 1.30pm-3.30pm AEST / 3.30pm-5.30pm
NZST

NWG Meeting #3: Thursday 15 September

12pm-1.30pm AEST/2pm-3.30pm NZST

NWG Meeting #4: Thursday 24 November

12pm-1.30pm AEDT/2pm-3.30pm NZDT



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Responsible Investment
Association Australasia

RIAA Nature WG

Sub-group 1: Awareness and education for investors

Survey updates

16 June 2022

Agenda slide

1. Nature in a nutshell launch
2. Survey results
3. FY23 priorities

Nature in a nutshell launch



Future topics

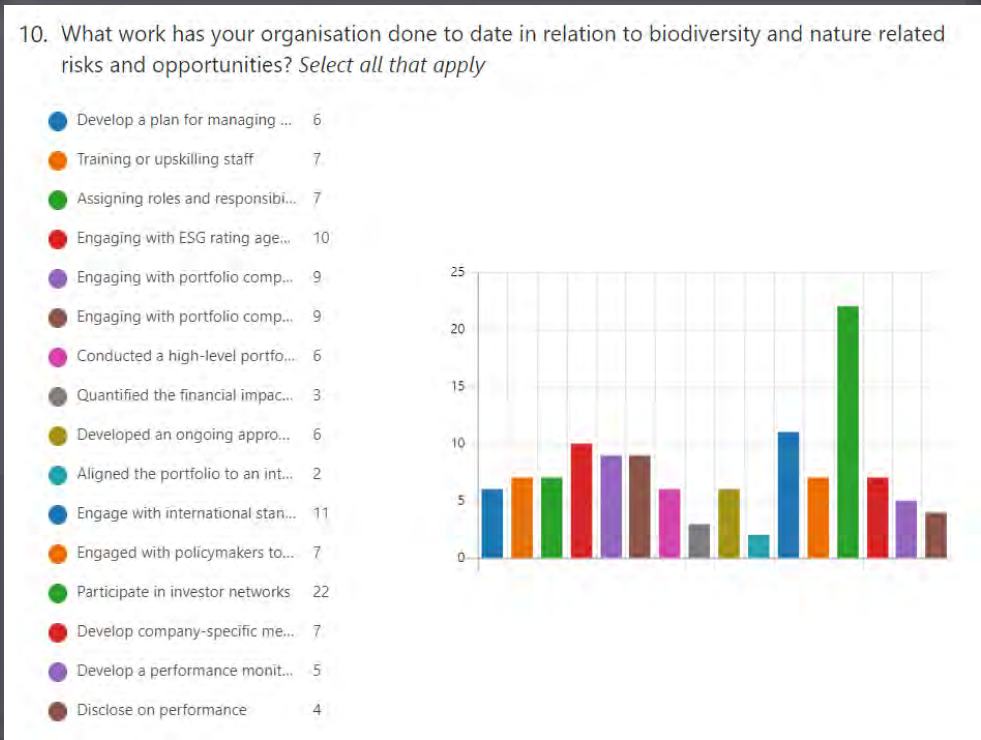
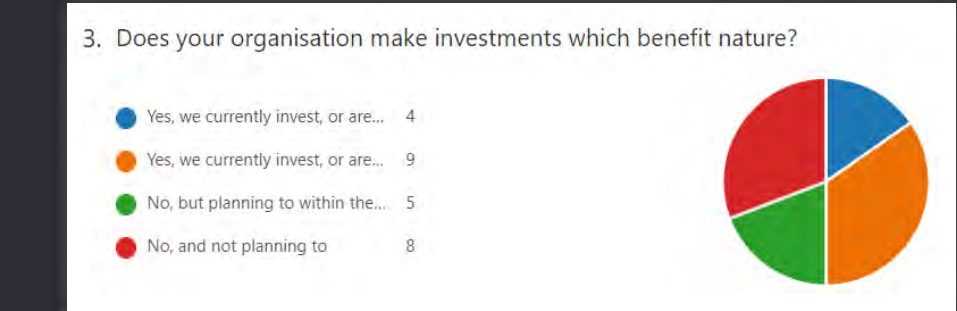
- ▶ Measurement, data, tools and metrics
- ▶ Demystifying biodiversity risks and impacts

A big thanks to the Altiolem team for all their ongoing help!



RIAA Nature Working Group - member survey results

► Survey undertaken in Q2 2022



RIAA Nature Working Group – member survey results

11. Does your organisation align with or apply any frameworks which you believe support and incentivise investment in natural capital?

This could include nature-specific frameworks, or those that provide guidance on how ESG generally (and as part of this, nature-related outcomes) can be included in financial sector policies, decision-making, measurement and reporting. This could include policy/principle frameworks (e.g. PRI) or standards/metrics frameworks (e.g. World Economic Forum, Global Reporting Initiative).



12. Please list the two frameworks which have been most useful for your organisation

20
Responses

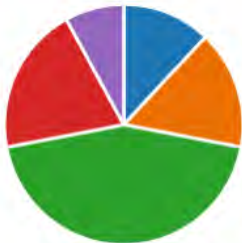
Latest Responses
"TCFD, PRI"
"We are not at the stage of reporting"
"PRI"

14. What is the biggest gap or challenge with the current frameworks or with their application?

26
Responses

Latest Responses
"Lack of suitable mature data solutions and metrics available to build ..."
"n/a"
"na"

18. On a scale from 1 to 5, with 1 being not at all prepared and 5 being completely prepared, what is your organisation's level of preparedness to identify, assess and manage nature-related risks and opportunities, including those linked to both your impacts and dependencies on nature?

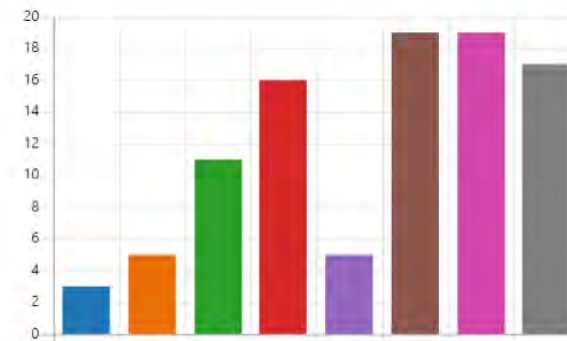


RIAA Nature Working Group – member survey results

19. On a scale from 1 to 5, with 1 being not at all prepared and 5 being completely prepared, what is your organisation’s level of preparedness to identify and disclose against metrics and targets used to manage nature-related risks and opportunities?



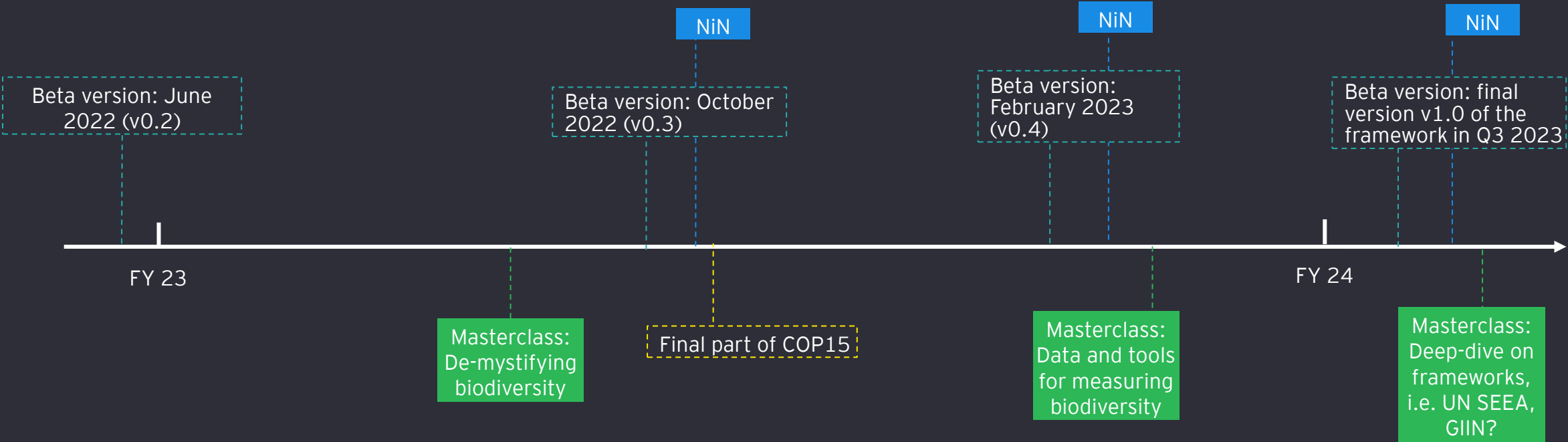
21. Which of the below topics would you like to see the RIAA Nature Working Group focus on in the future? *Select up to 5*



FY23 priorities

- ▶ Nature-in-a-nutshells
- ▶ Educational masterclass series

TNFD COP15



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Indicative work streams for engagement sub-group

- Provide a platform to facilitate members sharing examples and learnings from engagement with corporates on nature impacts
 - Working with Altiolem to gather engagement tools and resources for investor to corporate engagement
- Identify ways to leverage the work of other sub-groups to facilitate corporate education
 - E.g. TNFD education program through an industry association
- Specific engagement project targeting drivers of nature loss in Australia
- Staying up to date on nature related engagement initiatives (like Nature100)